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MARCH 18, 1961

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A SPECIAL REPORT

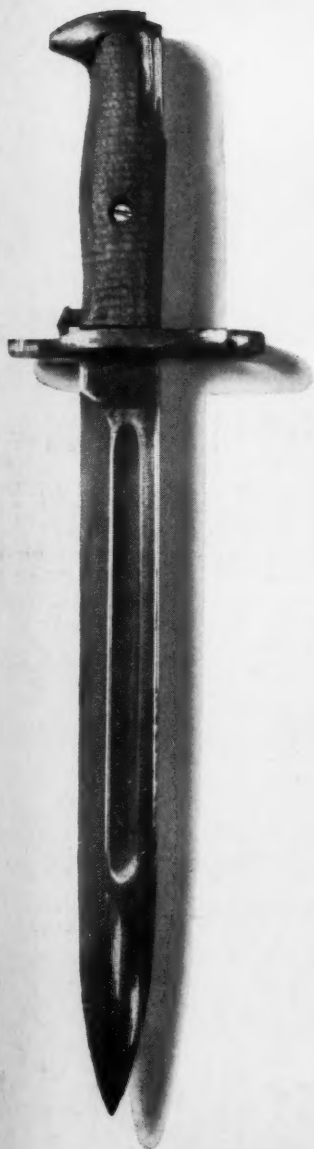
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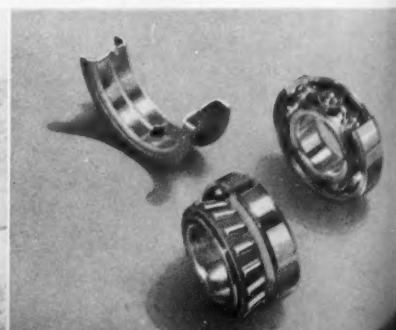
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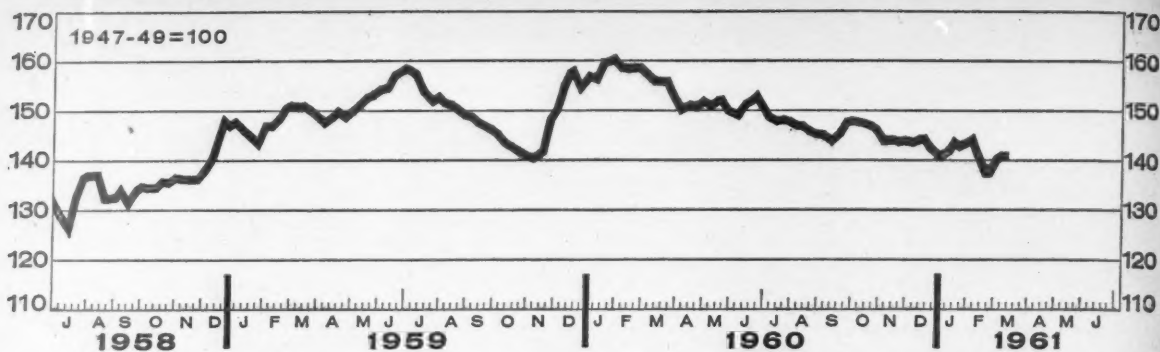
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NUMBER 1646

FIGURES of the WEEK



BUSINESS WEEK INDEX (chart)

PRODUCTION

	1953-55 Average	Year Ago	Month Ago	Week Ago	\$ Latest Week
Steel ingot (thous. of tons).....	2,032	2,654	1,524	1,580r	1,573
Automobiles	125,553	145,967	88,006	92,024r	92,819
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.).....	\$52,412	\$64,005	\$51,319	\$68,052	\$70,473
Electric power (millions of kilowatt-hours).....	10,819	14,271	14,744	14,226	14,353
Crude oil and condensate (daily av., thous. of bbls.).....	6,536	7,049	7,174	7,241	7,353
Bituminous coal (daily av., thous. of tons).....	1,455	1,300	1,213	1,103r	1,029
Paperboard (tons)	247,488	319,033	301,286	316,648	323,093

TRADE

Carloadings: miscellaneous and l.c.l. (daily av., thous. of cars).....	70	57	48	51	51
Carloadings: all others (daily av., thous. of cars).....	47	36	35	34	33
Department store sales index (1947-49 = 100, not seasonally adjusted).....	121	98	106	122	123
Business failures (Dun & Bradstreet, number).....	198	290	376	408	318

PRICES

Industrial raw materials, daily index (BLS, 1947-49 = 100).....	89.2	90.9	88.4	91.3	92.0
Foodstuffs, daily index (BLS, 1947-49 = 100).....	90.5	74.2	78.9	77.8	78.2
Print cloth (spot and nearby, yd.).....	19.8¢	22.0¢	17.5¢	17.5¢	17.5¢
Finished steel, index (BLS, 1947-49 = 100).....	143.9	186.8	186.2	186.2	186.2
Scrap steel composite (Iron Age, ton).....	\$36.10	\$33.50	\$33.50	\$35.83	\$37.83
Copper (electrolytic, delivered price, E&MJ, lb.).....	32.394¢	33.000¢	29.000¢	29.000¢	29.000¢
Aluminum, primary pig (U. S. del., E&MJ, lb.).....	20.6¢	26.0¢	26.0¢	26.0¢	26.0¢
Aluminum, secondary alloy #380, 1% zinc (U. S. del., E&MJ, lb.).....	††	25.02¢	22.90¢	22.92¢	22.73¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.34	\$2.12	\$2.05	\$2.05	\$2.02
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	34.57¢	32.05¢	30.34¢	30.92¢	31.00¢
Wool tops (Boston, lb.).....	\$1.96	\$1.75	\$1.70	\$1.65	\$1.66

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	31.64	54.43	61.60	63.75	63.52
Medium grade corporate bond yield (Baa issue, Moody's).....	3.59%	5.27%	5.07%	5.03%	5.02%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	2-2½%	4%	3%	3½%	3½%

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	††	59,586	60,224	59,291	58,985
Total loans and investments, reporting member banks.....	††	100,986	108,630	109,641	108,751
Commercial, industrial, and agricultural loans, reporting member banks....	††	31,219	32,131	32,389	32,359
U. S. Gov't guaranteed obligations held, reporting member banks.....	††	25,068	30,260	30,265	30,021
Total federal reserve credit outstanding	26,424	27,075	28,148	28,109	28,014
Gold stock	21,879	19,409	17,415	17,373	17,373

MONTHLY FIGURES OF THE WEEK

	1953-55 Average	Year Ago	Month Ago	Latest Month
Bank debits (in billions).....February.....	\$158.1	\$222.0	\$247.7	\$222.7
Average weekly earnings in manufacturing.....February.....	\$73.36	\$91.14	\$90.02	\$90.02
Retail sales (seasonally adjusted, in billions).....February.....	\$14.5	\$18.1	\$17.8	\$17.8
Exports (in millions).....January.....	\$1,290	\$1,561	\$1,797	\$1,647
Imports (in millions).....January.....	\$902	\$1,143	\$1,157	\$1,124

* Preliminary, week ended March 11, 1961.

†† Not available. Series revised.

Revised.

8 Date for 'Latest Week' on each series on request.

THE PICTURES—(cover)—Jose Acaba; 25, 26, 27—Ed Nano; 28-29—Tibor Hirsch; 32-33—Noel Clark; 45—Joseph Nettis; 53—Nat Council Inc.; 54—(left) WW, (right) Tibor Hirsch; 55—(left top) Tibor Hirsch, (left bottom) UPI, (middle and right) Tibor Hirsch; 78, 80, 84, 86, 89—Bud Blake; 117—(top) Herb Kratochvil, (middle) GE, (bottom) WW; 126, 127, 128, 130, 132—Herb Kratochvil; 138—C. A. Buzek.

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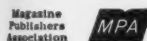
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BUSINESS WEEK • Mar. 18, 1961

READERS REPORT

Tools Via Trade-Ins

Dear Sir:

Your article entitled "Tool-maker Tries Detroit Lure" [BW—Mar. 4 '61, p42] while generally correct leaves an improper impression. As independent machine tool distributors representing several major American machine tool builders, we find their claim to a marketing first in the machine tool industry as basically inaccurate. Independent machine tool distributors generally at one time or another take used, surplus, or obsolete machines in trade against new machine tools without regard to make, model, or type. In 1925 when this firm was organized, we took this as a basic requirement and continue to offer this service to our customers. . . .

Fritz FiesseLMann

PRODUCTION MACHINERY SALES CO.
DETROIT, MICH.

Spending Pattern

Dear Sir:

In connection with your article, "New Spending Pattern Evolves" [BW—Feb. 18 '61, p77], I think it interesting to note that the proportion of consumption expenditures accounted for by services, although climbing since the end of the war as you point out, is still short of the 1929 percentage and substantially short of the percentage for 1932. You commented about the increase in expenditures for foreign travel. Actually, even the foreign travel expenditures as a percentage of total personal expenditures are not up to their 1929 level. . . .

RICHARD H. HOLTON

UNIVERSITY OF CALIF.
BERKELEY, CALIF.

Variety No Spice Here

Dear Sir:

Undoubtedly, Detroit has spent enough money on market surveys of consumer preferences to know that they must continue to spend millions annually on styling . . . [BW—Feb. 25 '61, p29].

I for one refuse to be bewildered by variety.

I shall drive my 1950 model a little longer and hope for the day when Detroit will build a car that can be sold year after year, without innovation, because it is a quality product.

DUANE A. DAVIS

PLAINFIELD, N. J.

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BUSINESS OUTLOOK

BUSINESS WEEK

MAR. 18, 1961



Many a businessman would give a good deal, right about now, to know how the consumer is going to act during the next few weeks.

Most manufacturers (barring autos) are convinced their business customers are in short supply on their products—from flat-rolled steel right on to textile products. On that basis, any pickup in consumer demand should bring rush orders.

Meanwhile, store sales support optimism—but hardly jubilation.

Retail sales in February were a little better than in January.

That, however, is about the best that can be said. The recovery to \$17.8-billion (seasonally adjusted) left February \$300-million short of the same month last year—and lower, in fact, than any month last year.

Improvement in February's retail sales—an old story—was almost entirely due to better volume in softgoods (BW—Mar. 11'61, p31).

Turnover in all stores handling nondurables rose to almost \$12.4-billion, seasonally adjusted. That was up more than \$100-million from the month before and \$300-million better than a year earlier.

Volume in durable goods was disappointing. January's dreary mark was topped by only a microscopic margin, and the total fell almost \$600-million below February, 1960.

Auto manufacturers profess that the worst is behind them and nothing but blue skies ahead (page 25). But the worst, as represented by the January-February sales total, was pretty gloomy.

For the two months, sales of new and used cars, trucks, and automotive products came to only about \$5.4-billion. Prices aside, that was the poorest since 1958—and not very much higher even than 1958.

Autos and automotive products were getting only about 17½¢ of the consumer's retail dollar in the first two months this year. In January, 1960, it was 18½¢ and in February a bit over 19¢.

Appliances and furniture got 4½¢ against 5¢ the year before.

Now these differences, measured in fractions of a penny to a penny and a half, may not sound like much. But figure them against annual retail volume of \$215-billion (even at the slow rate trade has been running the last two months) and this comes out to big money.

Retail trends, as far as durable goods are concerned, seem to have a very specific thing in common with early 1958 when another recession was getting pretty close to its low point:

Consumers are busily paying off installment debt.

Repayments of time-credit in January amounted to almost exactly half-a-billion dollars more than new loans. This net reduction in installment debt was the deepest for any month in recent history.

Installment paper on automobiles (both new and used) declined by some \$250-million in January. This marked the fourth month in a row in which there had been a reduction, cutting \$400-million off September's

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

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record total of just over \$18-billion. (February probably made it five months, for Commercial Credit reports its business still lagging.)

Such a pay-back isn't unusual in the winter, of course. And it may just be setting the stage for a sales splurge as spring arrives.

Yet it obviously has not yet brought real cheer to auto dealers.

—•—

This may cast some light on the degree of consumer caution:

Personal loans were paid down by nearly \$40-million during January. That was the first decline in the curve's long upsweep from \$3-billion in 1951 to \$11.2-billion in 1960 save a tiny dent in October, 1955.

This decline may be a good omen. If personal loans go up when other time-credit is declining, it often is considered a sign of distress. But a payoff on all fronts may be a point of strength.

—•—

Detailed figures on unemployment in February, released this week, show the worst spots to be autos and construction with 1 out of 4 workers jobless; steel with 1 out of 6; and machinery with 1 in 12.

In construction the high level of unemployment may be regarded as partly seasonal. To the extent that it is worse than seasonal, the drop came mainly in December, with the start of the bad weather. And March could show a more-than-seasonal comeback.

Factory layoffs in February, just as in so many preceding months, are what hit employment most severely.

The fact is that factory employment was more than a million below the year before and unemployment stood at 10% of the factory work force. Yet even these facts, serious as they are, can be overstressed.

It just so happens that February, 1960, had that year's highest employment (the peak usually is in the autumn).

Factory employment now is about 100,000 less than it was in 1958 and about 30,000 less than in 1959, declines that might be attributed to mechanization and automation.

In a more hopeful vein, over-all employment in February still was 100,000 higher even than in 1960, 1.9-million better than in 1959, and 2.7-million above the level for the same 1958 month.

Here's something else to bear in mind concerning factory workers:

The number of blue-collar workers has been declining for years; they now number 2½-million less than at the 1953 peak and 2-million less than at the highest point during 1956.

Meanwhile, the supervisory and white-collar force has risen from under 3½-million in 1953 to more than 4-million.

—•—

Mortgage money has been getting easier—but rarely on an area-wide, publicly announced basis. That gives added interest to the Boston savings banks' formal move this week, cutting the rate to 5¼% from 5½%.

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Business Sees an Upturn Near

Mood of cautious optimism prevails in business, and many executives think bottom has been reached; but they expect only modest recovery, worry about profit squeeze.

Business has now had a couple of weeks to brood about the possible meaning of the moderate upturn in sales that followed the letup in the wretched weather over much of the country. It has had somewhat longer to think about the possible business implications of the new Administration's stream of pronouncements about the economy and legislative proposals.

Businessmen are having a hard time reading these signs. But, in spite of these difficulties, **BUSINESS WEEK** reporters, talking with scores of executives across the country this week, found a cautious optimism beginning to pervade the business community. Like the Cleveland executives in the pictures below and on page 26, businessmen in all parts of the country are beginning to sense an improvement in the general tone of business.

• **Unclear Signs**—The talks with businessmen showed that it's still too early for most of them to tell whether the

improving tone of sales is something more than a temporary rebound resulting from better weather and this year's early Easter, and whether it will peter out as spring wears on.

And business is not yet clear about the economic meaning of the Kennedy legislative proposals. It's not sure, either, which of these proposals will actually become law.

Many businessmen would echo the wry complaint of Harold M. Williams, executive vice-president of Hunt Foods & Industries, Inc.: "People I talk to have a general lack of knowledge, which makes things very confusing. Even the people I usually turn to for advice are confused."

• **Agreement**—Nevertheless, almost all of the businessmen who talked to **BUSINESS WEEK** reporters think the economy is in the process of coming out of the recession. Many of them think the bottom has already been reached. Most of those who don't see

it yet think April will bring an upturn.

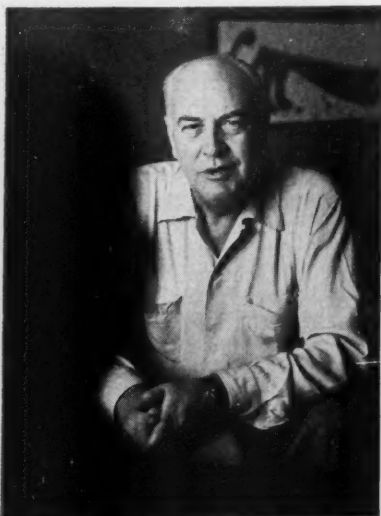
Nobody looks for the economy to skyrocket in 1961—businessmen are virtually unanimous in feeling that the recovery in the second half will be modest. Many businessmen are very much worried, too, about the possibility that recovery won't bring them much relief from the profit squeeze that has plagued business since the onset of the current recession.

• **Buyer Interest**—Clear signs of the end of the recession have, as yet, appeared on the order books of only a minority of companies; only a few can report an actual upturn in new orders. Instead, most businessmen base their hopes of an upturn, in the words of a Houston oilfield equipment supplier, "on a welcome leveling off in the downtrend of new orders."

Most companies expect this downtrend to reverse itself soon. Their basis: a distinct "quickenening of interest" among their customers.

A spokesman for Aluminum Co. of America says his company's sales offices "are reporting a lot more activity on the part of customers. Not orders but customer inquiries. Customers are calling a lot more these days, wanting more

How Cleveland Businessmen View It . . .



B. W. MAXEY, vice-president (finance), Clidden Co.: "There is no question but what we have hit bottom. The uptrend has definitely started . . ."



WALTER J. TUOHY, president, Chesapeake & Ohio Ry.: "Our February traffic revenues indicated a continued leveling out of the general business recession."



J. N. BAUMAN, president, White Motor Co.: "We expect a reverse—a better second half than the first half, with the year as a whole as good or better than 1960."

How Cleveland Businessmen View It . . .



MATHEW J. LUDWIG, vice-president and comptroller, Basic, Inc.: "We've definitely started up. In spite of the recession, we have a lot more people working."



WADE N. HARRIS, president Midland-Ross Corp.: "There is enough need for things to cause a pickup in business. . . . The auto business is as bad as it is going to be."

product information, asking for tentative bids."

Walter J. McGregor, sales manager of Berman Steel Co., an Atlanta steel fabricator, says his company, too, has a lot more inquiries. And Albert G. Handschumacher, president of Lear, Inc., reports more inquiries "for industrial controls on new installations planned for around autumn."

• **Inventories Low**—Businessmen think the basis of increased buyer interest lies in the greatly improved inventory picture. Most companies report their inventories in excellent shape. They think their customers' inventories have reached the point where an upturn in new orders is imminent. Steel users say their inventories are low, thus backing up Pittsburgh's expectation of an increase in the steel operating rate (page 34).

• **Consumers Astir**—There are also indications that consumers are starting to move again. The clearest signs appear, in the typical opinion of a Dallas department store operator, "in the preludes to buying rather than in buying itself."

Department stores around the country, as well as auto dealers and home-builders, report an increase in consumer traffic lately—people coming in to look.

Some retailers worry that the increase in consumer activity may be temporary, but many would agree with Arthur Meyer, president of Meyer Bros., suburban Houston department store, that

"when you take March and April as a unit and compare them with last year, you're going to find that we are doing better in 1961 than a year ago."

The manager of a suburban luxury department store in Los Angeles County says: "Home furnishings, weak since last fall, are now moving up."

• **Auto Confidence**—In Detroit, too, you find a reasoned conviction that the past few weeks' spurt in auto sales is not temporary.

A senior economist for one of the Big Three auto producers thinks the way in which his industry has come out of the December-February sales slump may be an indication of an upturn in the economy. He points out that in earlier business cycles auto sales have typically gone down more sharply than those of other industries, but come up faster.

A top marketing executive for one of the Big Three—a man with industry-wide reputation for conservatism—is enormously encouraged by the end-of-February pickup.

• **Residue of Doubt**—Yet there's a residue of doubt about a resurgence of consumer spending.

One retailing executive feels that although the employed have plenty of money, they are still wary; he says his store's revolving charge accounts show that customers are paying off debt instead of buying more goods—"our net collections are way too high."

A Southern businessman says, "Unemployment and the fear of job loss

are hurting consumption. Consumers are still a bit scared."

Many businessmen think the scare talk that has been coming out of Washington has damaged consumer confidence. A good number would agree with Dave Fox, of Fox & Jacobs Construction Co. in Dallas, that "the new Administration hasn't done anything yet but upset people."

But other businessmen feel that the fairly firm predictions of a business upturn that came out of Washington last week (BW-Mar. 11'61, p32) will bolster consumer confidence.

• **Profit Worries**—The main worry of executives right now, however, seems to be that the expected upturn won't bring much relief from the profit squeeze. Most businessmen seem to agree with Pres. W. O. Bartle of Brewster-Bartle Drilling Co., who says, "Increased business will probably bring increased total profits, but our rate of profit will continue to be strained."

A Milwaukee capital goods manufacturer thinks the profit squeeze, in fact, will tighten. Costs will continue to rise, he says, as a result of a continuing upcreep in wages while competitive pressures will keep prices from going up proportionately.

As for cost inflation, businessmen worry about the inflationary consequences of the Kennedy recovery proposals. M. J. Vollmer, treasurer and financial vice-president of the A. O. Smith Corp., says, "The main impact of the Kennedy program will come too

late to contribute much to an upturn, and could easily end up by feeding the fires of an inflation."

• **Wage-Price Squeeze**—Many businessmen fear that, despite its pronouncements to the contrary, the Kennedy Administration will be forced to back organized labor's demand for higher wages. These executives point to the election debts owed by the Democrats to organized labor. One feels that although Labor Secy. Arthur J. Goldberg has a good record in settling strikes so far, he has done so only at the expense of "putting off the day of reckoning."

And a Denver manufacturing executive feels—as many other businessmen do—that when this day of reckoning comes, the government will back wage increases. Southern businessmen—particularly in retailing—also see possible pressure on wages coming from the passage of the Administration's minimum wage bill.

One observer thinks big companies in basic industries will be reluctant to raise prices in view of the possibility that the Administration may follow the policy—advocated by Harvard's John Kenneth Galbraith—of subjecting price increases in basic industries to "public scrutiny."

• **Disenchantment** — These worries about a possible wage-price squeeze are the major factor behind what appears to be a growing disenchantment of business with the economic policies of the Kennedy Administration. It is reinforced by fears about the long-run consequences of some Kennedy programs.

You can find considerable support for the opinion of Bekins Van & Storage Co. Pres. Daniel P. Bryant that "the Kennedy Administration is putting on a 'virtuoso' performance, which will not strengthen the economy in the long run."

This disenchantment is not universal among businessmen, nor does it amount to real hostility. Business continues to feel—as it did just after the election (BW—Nov. 19 '60, p42)—that Kennedy's basic posture is "middle of the road, combined with vigor," as a Florida businessman put it. There is wide agreement with the opinion of Walter McGregor, of Atlanta's Berman Steel Co., that in combating the recession, "the Administration has done only what any Administration, Republican or Democratic, would have done."

Moreover, few businessmen think that Kennedy has done any real damage to the business climate. Ivan Allen, Jr., head of Ivan Allen Co., a large Atlanta office supply company, feels that business has been reassured by Kennedy's appointments, which "have been strong—and conservatively so."

Kennedy Unveils Farm Policy

Administration will peg farm commodity prices at high levels, but only if producers are willing to participate in programs that effectively control production.

The new farm policy that Pres. Kennedy offered Congress—and the farmers—this week had no ultimatum in it. But both the farmers and the legislators got the message:

This Administration will peg farm prices at high levels, but it wants farm programs that effectively bring supply of farm commodities into relationship with demand. It will support the prices of farm commodities or the income of the producers only if they vote for firmer production controls that actually will reduce output.

Kennedy says he is out to "end the drift in farm policy" that keeps piling up surpluses and costs the taxpayers billions in support and storage charges each year.

• **Executive Control**—To do this, Kennedy proposes specifically that responsibility for devising a farm program to fit a particular commodity be turned over by Congress to the Executive Branch in the "Agricultural Enabling Amendments Act of 1961." The President pointedly compares the farm problem to the tariff problem—which, he says, Congress turned over to the Executive Branch "a generation ago."

Kennedy's proposed amendments would give the Administration wide latitude to use authority already on the books. Among other things, the Secretary of Agriculture can adjust support prices, make conservation payments, establish marketing orders and agreements, order acreage cutbacks and fix quotas on farm shipments, make "compensatory" or incentive payments (as in the Brannan Plan), and make loans on crops and store them.

At present, though, the Secretary—through past commitments, pressures from Congress, and the like—has been restricted in how effectively he can use these devices to control supply of a given crop.

• **Farmers Vote**—Now, Kennedy and Agriculture Secy. Orville L. Freeman want to be able to use any or all of these authorities, techniques, and subsidies to devise a program for a specific commodity—and then put it up to the farmers to vote it up or down.

Kennedy's first recommendation urges the application of marketing agreements—of the kind that now control production and supply of milk, tobacco, and citrus fruits—to other commodities. Under such agreements, producers are exempted from the antitrust laws in that they are allowed to control ship-

ments themselves to assure an orderly market and stable prices—all under supervision of the Secretary of Agriculture.

In spreading this kind of production control, the President wants authority to decide on marketing quotas for any grower in "quantitative terms—pounds, bushels, or bales."

• **Formula**—Here's how the system would work:

• "National farmer advisory committees" for every affected commodity would work with and make recommendations to the Secretary of Agriculture on a "supply adjustment program."

• This program—which could be a package incorporating a variety of controls, support devices, or payments—would be initiated by the Secretary, "under Presidential direction."

• Programs involving controls over production and marketing would not be effective until approved by two-thirds of the producers.

• All programs would be submitted to Congress 60 days before they became effective, and they could be vetoed by either house by majority vote.

• **Typical Program**—Kennedy at mid-week had a typical example of Administration-backed farm legislation boiling furiously in Congress. The Administration recommended an "emergency program" supporting the price of corn at \$1.20 a bushel, but in return it demanded assurance that a majority of the corn-growers agree to acreage cutbacks. To put the pressure on, Kennedy insisted on authority for Secy. Freeman to sell surplus corn and thus drive down the price so that non-complying farmers would not benefit by a price support program they weren't in on.

Only a firm Kennedy pledge on this won enough city-Democrat votes to squeak the corn-support bill through the House—but the Senate completely rejected this provision and Senate conferees promised they wouldn't go along with a conference agreement that included it.

Actually, growers of many commodities now go it alone without any government props at all. As farming has become more of a business, with technology and modern equipment the key to success, more farmers have realized they can make a profit at lower prices than the government's support price. In fact, this is the key to the current legislative snarl over corn in Congress.



NEW LOWER DECK for George Washington Bridge is one of many projects pushing heavy construction 10% ahead of 1960.

Construction Jumps but Profits S

Back in mid-1958, a lively runup of construction volume helped the U.S. come out of a recession (BW—Jun.14 '58,p25).

By this week—the 11th week of a recession year—it is clear from a mounting pile of data and a lot of pulse-taking that construction is once more taking on its old role. "Heavy construction" is showing the way. But this time no help is coming from homebuilding. Instead, contractors are putting up commercial, industrial, and government buildings, laying roads, and fabricating public and private facilities such as generating stations and missile bases—and doing it at a faster pace than ever.

• **Up and Up**—In the first two months of the year, they put in place \$4.4-billion worth of heavy construction, 10% more than in the same two months last year.

Even more is coming. Contract awards, which represent money that has not yet, but will be spent, are running ahead of last year by 10%, too. There's a special boom in road building contracts, up 43% so far this year over the same period last. It's

estimated that \$7-billion will be spent on roads before the year is out.

Most of the money for heavy construction still comes from individuals and companies. However, the rate of spending by public agencies is racing ahead of the private sector this year, as these tables show:

HEAVY CONSTRUCTION

Contract Awards for 10 Weeks
(billions of dollars)

	1960	1961	
Private	1.87	1.92	Up 2%
Public	1.58	1.87	Up 18%
Total	3.45	3.79	Up 10%

(Data: Engineering News-Record, Construction Daily)

Construction Put in Place, January-February
(except residential and farm building)

	1960	1961	
Private	2.3	2.5	Up 8.7%
Public	1.7	2.0	Up 17.6%
Total	4.0	4.5	Up 12.5%

(Data: Dept. of Commerce)

• **Crying Contractors**—Just from talking to contractors around the country, though, you might never guess that over-all construction volume is actually so healthy. A reporter in Cleveland sums it up: "Contractors here are cry-

ing when you can get them to talk at all."

A San Francisco contractor denies volume is rising at all. "If anything," he says, "it's lower, and the immediate outlook is gloomy." Harold H. Gebert, vice-president of R. M. Shoemaker in Philadelphia, compares business today with the Depression years.

With contractors in such a mood, it's not surprising that manufacturers of construction machinery are not yet feeling the effects of the rise in construction. For one thing, awards are spread so thin that the rise in contracts is no gold rush. That makes contractors wary about commitments for new machinery. The manufacturers themselves say they expect no rise in their sales unless public works and highway programs are speeded up.

• **Contractor Competition**—At the bottom of the paradox of rising overall volume and complaining contractors who shun equipment purchases is this—an oversupply of contractors. A large Philadelphia contractor notes that the number of bidders on a job today is more than twice the number several years ago. This makes for a capacity



ts Stay Thin

to build more plant road, and facilities than anyone wants or can afford to have.

For many contractors the overcapacity has meant bankruptcy, though two will appear to take the place of every one that dies off.

Contractors everywhere complain about profits. Most say they should make 10% to 15% on a job but actually make between 1% and 5%—or nothing at all.

Others pressure suppliers for lower prices—bidding lower than they can afford to go with the hope they “can chisel down their subcontractors and suppliers,” as a San Francisco contractor reports.

• **Getting Out of Pinch**—One way of avoiding bidding is the negotiated job. In this, contractors are taking a cue from defense suppliers. One company in San Francisco with a \$30-million backlog gets most of its jobs this way.

Some Los Angeles contractors are thinking of taking another page from the defense supply book—the cost plus fixed fee. These are contractors doing business with builders of government projects. They complain that change

orders are so frequent, particularly on missile bases, that they can't profit.

• **Good Time to Build**—For the company or public agency planning to build, contractors all over the country say “this is a good time.” Prices are low, they say; some contractors are seeking jobs to keep expensive machinery going, and others are “simply hungry.”

A California electric power company official says “right now we can get a job done cheaper than in 1959.” In Chicago, architect and engineer Ralph Stoetzel says building contracts are being let for about 5% less than a year ago—and since contractors on big jobs have made about 5%, he figures they are now taking on jobs for about break-even.

Taxes to Soak the Truckers

High officials assure Ways & Means Committee that the plan is equitable. They say \$1-billion more per year is essential to keeping the big highway program going.

Pres. Kennedy sent his top brass to Congress this week to argue for tax increases of \$1-billion or more a year needed to keep the huge highway construction program on schedule and on a pay-as-you-go basis.

Treasury Secy. C. Douglas Dillon, Commerce Secy. Luther H. Hodges, Highway Administrator Rex Whitton, and Budget Director David E. Bell testified before an unenthusiastic House Ways & Means Committee. They brought along new ammunition to back up their request that truckers in particular should pay a larger share of the cost of completing federal highways.

• **Shift of Burden**—The Administration hopes its sock-the-truckers tax plan will put the congressmen in a squeeze—the ordinary car-driving voter is likely to favor putting a bite on the big trucks he sees on the highways, rather than favoring more tax on himself.

The program would put a new heavy burden on truck and bus operators. It would boost the excise on diesel fuel from 4¢ to 7¢ per gal., on tires from 8¢ to 10¢ per lb., tubes from 9¢ to 10¢ per lb., tread rubber from 3¢ to 10¢ per lb., and the annual federal tax on trucks and buses over 26,000 lb. from \$1.50 to \$5 per 1,000 lb.

For the individual car driver, the present 4¢ a gal. federal tax on fuel would stay the same.

• **Cost Study**—The real foundation for Kennedy's soak-the-truck program came from preliminary figures from a two-year, \$27-million test program finished at Ottawa, Ill., last fall. The study was made to determine how much wear and tear trucks give different kinds of highway construction under all kinds of driving conditions.

The politically potent conclusions from this study weren't supposed to be ready before next summer, but Whitton said that the preliminary findings square with the cost allocations under Kennedy's highway-user tax plan.

Under this plan, a passenger car weighing 2 tons and traveling 10,000

mi. per year would pay about \$30 per year in federal taxes. At the other end of the scale, a four-axle combination truck-trailer weighing around 30 tons and traveling 60,000 mi. per year would pay \$1,080 or more.

The cost-allocation formula that produced these figures is the one that the Bureau of Public Roads considers “the most sound.”

This “incremental method” figures the cost of building a highway appropriate for an auto, then how much more it costs to build the road to accommodate progressively heavier trucks and buses.

• **Political Bind**—The Democrats in Congress are in a bind that's partly of their own making. A couple of years ago they refused Eisenhower the pay-as-you-go tax package he wanted. Instead they voted to keep the highway trust fund going with a temporary 1¢ increase in the gasoline tax; the 1¢ extra is due to expire June 30. At the same time, they provided that, beginning July 1, about \$800-million of excise taxes on autos and parts would be diverted to the trust fund to replace the revenue lost when the gasoline tax dropped to 3¢.

Now Kennedy wants these taxes kept in the Treasury's general fund to pay for other programs, though committee members wondered aloud why these user taxes shouldn't go to highway construction along with the others.

• **Reaching Out**—Another thing that bothers some Ways & Means members: the jump to a tax of 7¢ per gal. on diesel fuel. The Administration answer: This tax rate provides about the same tax cost per mile for diesel operators as the 4¢ per gal. tax on gasoline.

Airlines and other aircraft operators are threatened soon with a pay-as-you-fly tax program. Dillon noted that federal spending on the airways systems is close to \$600-million a year, and that aviation gasoline (now taxed at 2¢ a gal.) and jet fuel (untaxed) should “make a greater contribution to federal revenues.”

Aid Plan for Latin America

President's proposed 10-year program, patterned on the Marshall Plan, is aimed at eliminating many economic, social, and political ills in America's southern republics.

Pres. Kennedy this week began to formulate a policy for Latin America. In an address before Latin American diplomats and in a message to Congress, he proposed an "Alliance for Progress" that calls for 10 years of maximum effort to begin eliminating economic, social, and political ills south of the border.

In approach, the Kennedy program is patterned after the Marshall Plan, the post-World War II recovery program for Europe's devastated economies. It puts primary responsibility for advancement on the countries receiving U.S. aid and the benefits of the program. It also takes the long view of economic development, social reform, and political stabilization, rather than emphasizing the solution of current problems.

Beyond that, however, the pattern doesn't hold. Where the Marshall Plan was concerned with rebuilding war-torn industrialized economies, the Alliance for Progress will help underdeveloped, or partially developed, nations to mature into 20th Century economies.

- **Lack of Specifics**—For the first time the U.S. appears to have a well-rounded approach to Latin American problems, not just a patchwork of unrelated schemes. Even so, there is a marked lack of specifics in a number of Kennedy's proposals; the methods by which they will be carried out has not yet been made clear; and the total cost and U.S. share of the plan is only hinted at. Moreover, many businessmen will not be happy with the emphasis on government planning and government participation implied in the program.

- **Three Main Parts**—The program groups itself into three main parts:

The first is economic development. Kennedy is asking the American nations to join in an effort to raise living standards, provide basic education for all, and make hunger a forgotten experience. To begin the "massive planning effort" required for this, the President will shortly ask for a meeting of the Inter-American Economic & Social Council, an affiliate of the Organization of American States (OAS).

This week, he also sent to Congress a message requesting fast appropriation of the \$500-million social development fund to which the U.S. committed itself last fall at Bogota, Colombia. This is the first concrete step in getting the program started. Kennedy promised

"to commit these funds as soon as they are appropriated."

The second part of the program covers U.S. trade with Latin America. The President said that the U.S. "must support all economic integration which is a genuine step toward larger markets and greater competitive opportunity." He was referring to the Central American Common Market and the Latin American Free Trade Area, which is scheduled to be ratified this spring.

In a more controversial area, Kennedy pledged that the U.S. would "cooperate in serious, case-by-case examination of commodity market problems." This is a subject dear to most Latin Americans, whose economies are strongly affected by the fluctuation in the price and sales of the one or two particular commodities that they export. The President also announced that the U.S. will immediately increase its "Food for Peace" shipments to Latin America, noting that "hungry men and women cannot wait for economic discussions or diplomatic meetings."

Next comes science, education, and cultural exchanges, in which the U.S. will share scientific advances with Latin America and expand joint scientific ventures. Kennedy said that the Americas must "expand the training of those needed to man the economies of rapidly developing countries." He asked Latin Americans to send teachers of Latin American history, literature, and culture to this country and to accept U.S. students in their universities.

- **Collective Security**—The President also reaffirmed the U.S. pledge to defend the hemisphere. But he went further to point out that as confidence in collective security spreads, Latin American nations could devote less of their national budgets to arms and more to economic and social reforms.

Kennedy has also spelled out the U.S. political attitude toward Latin America. He is seeking to cast the Alliance for Progress in a positive mold, viewing it as a move toward the completion of the revolution that began in North America in 1776 and in South America in 1811. He has deliberately avoided using talk of Communism to frighten Latin America into the alliance.

The President drove his point home with a twist on Fidel Castro's chant "Cuba, si, Yankees, no" by using the motto "progress, yes, tyranny, no." He further urged the alliance "to eliminate

tyranny from a hemisphere in which it has no rightful place," taking a stand against dictators that Latin Americans have long accused the U.S. of coddling.

- **The Price**—The President didn't put a dollar figure on the U.S. contribution to the plan. At midweek one Washington official mentioned \$13-billion over 10 years, but the State Dept. quickly denied that any estimate could be made yet. The Marshall Plan also involved about \$13-billion, but, unlike the Marshall Plan, not all the money for Latin America will come from the public coffers. Washington is counting on private U.S. investment for about half of the total. There will probably be more public investment in the early years, tapering off as the Latin American economies begin to attract and generate more private capital.

Another difference from the Marshall Plan will be the form in which U.S. money goes abroad. Kennedy's program calls for few outright grants and will emphasize hard and soft loans. In contrast, the Marshall Plan was largely made up of gifts.

This year the U.S. will put about \$105-billion into Latin America, when you add up the \$500-million social development fund, current private investment, and present foreign aid outlays.

- **How Long**—The President has defined the time element involved by pointing out that the 10 years of his plan will be the "years when the need for assistance will be greatest." After that "the need for massive outside help will have passed," most nations having entered a period of self-sustaining growth.

A Presidential task force headed by Adolf A. Berle, the President's coordinator of inter-American affairs, is working on detailed phases of U.S.-Latin American policy.

- **Mixed Reception**—Reaction to Kennedy's proposals is mixed. A number of Congressional leaders have praised it, as have some prominent Latin Americans. Other Latin Americans are disappointed that the plan isn't more specific.

In Washington, the most common criticism is that beautiful plans for economic and social development in Latin America have been prepared by the score over the years. Programs suggested by the World Bank, the United Nations' Economic Commission for Latin America, and others have been pigeonholed by political opposition.

As one dubious critic puts it: "A real revolution is what's needed. Revolution almost never is nice and orderly, particularly in Latin America where many people still understand the carbine better than the ballot. Kennedy will find that it isn't easy to grow a revolution in a neat suburban hothouse."

Hot Money on Move Again

Bonn's revaluation of the D-mark has backfired, at least for the moment, and caused short-term funds to move into West Germany and away from London and New York.

When West Germany increased the value of the Deutschmark last week, it touched off the biggest and most violent movement of international hot money since London's gold rush last October (BW-Oct.29'60,p23).

Ironically, short-term funds moved into West Germany—and away from London and New York. The 5% revaluation was designed to have the opposite effect, but as one international banker put it, "The speculators have tasted blood, and no matter what you say, they won't believe that another revaluation isn't in the wind."

• **Speculative Psychology**—This week's violent movements in the international capital markets emphasize the role played by psychological attitudes. Most international bankers have favored a revaluation of the mark; but now that it has finally come, speculators feel that the 5% change was not enough. They are betting on another increase even though German officials say it is out of the question.

While the German D-mark and the Swiss franc were in demand, the dollar and the pound were hard hit by the speculators. The Bank of England, according to widespread reports, had to draw the equivalent of almost \$300-million from its gold and foreign exchange reserves to support the pound sterling in the open market by purchasing the pounds the speculators were offering. That works out to almost 10% of total British reserves.

Most well-informed bankers are playing down the danger that speculation could get out of hand and produce an international financial crisis. The big shift of funds, though, has been unsettling. One U.S. official guesses that "before this thing is over, the Germans will gain about \$500-million in new reserves, and the British may have to replenish their reserves by drawing on the International Monetary Fund."

• **Seeking Fever Cure**—Although Germany's move was a surprise, the reaction of the speculators was even more surprising. The immediate problem was to dampen the speculative fever. This week, Europe's principal central bankers, after a regular—but secret—meeting at the Bank for International Settlements in Basle, Switzerland, took the unprecedented step of issuing a statement that they were convinced that the rumors of new revaluations "were without foundation."

In addition, the Germans made a

strong diplomatic protest to the State Dept. about Washington comments that the revaluation was a "modest step in the right direction." The Germans feel that this attitude only added fuel to the fire by implying that another revaluation may be on the way.

• **Partial Recovery**—The drive to shake the currency speculators out of the market was not limited to jawbone tactics. The Bank of England, in moving into the market with such massive support for the pound, may have been trying to do more than simply keep sterling from dropping below the \$2.78 minimum that is required under IMF rules. According to foreign exchange traders,

AEC Gets Its First Competition

Formation of United Nuclear Corp. is industry's maiden attempt to break into the nuclear reprocessing business.

Industry has figured out a brand-new way to try to get a crack at the nuclear fuels reprocessing business. At least, that is how observers interpret the significance of plans announced this week for the formation of United Nuclear Corp.

The pitch will be the advantages of a broader base of nuclear services—from designing and developing new reactor systems to reprocessing hot scrap to handling waste disposal—all under one corporate tent.

Making the pitch will be the newest member of the nuclear industry—a \$25-million baby formed out of a combination of the personnel and facilities of Nuclear Development Corp. of America (NDA), Olin Mathieson Chemical Corp.'s Nuclear Fuels operations, and the commercial facilities of Mallinckrodt Chemical Works' Nuclear Div. at St. Louis and Hematite, Mo. The new corporation's first president will be William C. Foster, director and vice-president of Olin Mathieson.

• **More Interest**—In the past few months, other companies also have been studying the prospect of getting into nuclear fuel reprocessing—a chemical reprocessing service that the Atomic Energy Commission offers at its Oak Ridge, Arco, Hanford, and Savannah River plants.

Their interest stems from the fact that the potential market in the U.S. is beginning to open. On June 30, 1960, 66 civilian and military reactors were

the Bank wanted to force up the price of sterling so that speculators—chiefly Germans—who had sold the pound short, would be forced to liquidate their positions at a loss. And at midweek, it looked as if the Bank had succeeded.

Partly because of this official intervention, both sterling and the dollar recovered some of their losses. Bankers in London said that a huge short position in both currencies was starting to unwind and that demand due to short covering was helping to stabilize prices.

• **Key Question**—The basic question is whether Germany's revaluation will produce a new equilibrium in international money flows. So far, the results have been disappointing, but in time the 5% revaluation may prove successful in halting the big buildup of German reserves. At present, most bankers doubt this. Certainly, coordination of interest-rate policies—a key point in the Kennedy program to fight the U.S. balance-of-payments deficit—will be more difficult from now on.

under active design or construction, compared with 40 on the same date in 1959; and 22 nuclear submarines or other naval vessels requiring replacement fuel elements are now at sea.

• **Heavy Competition**—Up to now, the chief thing that deterred companies from moving into nuclear fuel reprocessing apparently was a matter of economics. The question is whether a private company can afford to supply reprocessing services to private power plants when AEC has already promised the utilities that it will handle such matters through June 30, 1967.

Last fall, the plans of W. R. Grace & Co.'s Davison Chemical Div. to build a \$22-million, 300-ton-per-year reprocessing plant were stymied when two of its five cooperating utilities suddenly decided it would be cheaper to buy such services from AEC. Since then, however, Davison has lined up three new potential customers and has a verbal commitment from AEC for 50 to 75 tons a year of business. Davison is expected to announce soon that it is going ahead with the project.

• **First Steps**—If United Nuclear is serious about building a nuclear fuel reprocessing plant, it will have to run economic feasibility estimates on the particular type of plant planned. It will then be in a position to make an official proposal to AEC, and the government's reprocessing business will have to be opened to competitive bidding.



HOUSING chief Robert C. Weaver seeks new markets among lower-income families:



"One can ask questions about 40-year mortgages, but consider the alternatives."



"For urban renewal, we want more money, more local discretion, and new tools."

For Housing—The Same, but M

Ever since the cities put John F. Kennedy in the White House last November, they have wondered how he would pay them back. They found out last week when Pres. Kennedy sent Congress his message on housing and community development.

• **The Key Proposals**—The President will be sending specific proposals to the Capitol during the next few weeks, but already it is possible to determine the shape of Administration policy. Much of it reflects the thinking of Housing Administrator Robert C. Weaver (pictures). Some of the key elements:

• Use liberal credit and special government loans to house lower-middle income families.

• Speed up urban renewal—with twice as much federal money, greater local discretion in its use, fewer bureaucratic obstacles.

• Use federal loans and grants to rehabilitate old housing that can be saved.

• Use federal money to persuade communities in metropolitan areas to plan—and act—on a metropolitan scale.

• Get mortgage lenders—primarily savings and loan associations, savings banks, and insurance companies—to lower their mortgage rates.

In all this, there is no grand new design, such as the urban renewal program that began with Title I of the 1949 Housing Act. Weaver feels that ample machinery for housing programs already is on the books.

For the most part, the Administration simply proposes to get more out of the existing machinery. For urban renewal and public facilities, the President advocated more money—quite a

bit more, to be sure. For public housing, he only asked Congress to restore units authorized in 1949. In urging greater coordination between federal housing and highway officials, he only picked up where the Eisenhower Administration left off.

• **New Approaches**—But the message is not entirely void of fresh programs. There are 40-year insured mortgages for lower-middle income families who can't afford to buy homes under present terms. There are federal loans for apartments for people of even more modest means. And there is federal money to help communities—where metropolitan plans exist—to acquire open space so that they can better regulate development of the land around them.

There's also a push to get lower mortgage rates. This is part of Kennedy's over-all policy of seeking lower long-term lending rates in order to stimulate lending. And on this score, the Administration's jawbone technique appears to be working. This week, S&Ls in many key cities across the country announced cuts in mortgage rates and mutual savings banks were quick to follow suit.

Viewing all this as a package, the spokesmen for cities are pleased. They are particularly delighted that Kennedy is seeking urban renewal grants of about \$600-million yearly.

I. The Untapped Market

Of the fresh approaches outlined by the President, none has more immediate significance than those to house families of moderate income. Cities and states have made a variety of efforts to

shelter these families, but their success has been limited.

The income range of the families in question varies from city to city, but essentially those involved make too much to be eligible for public housing and too little to afford to rent or buy decent private housing on their own.

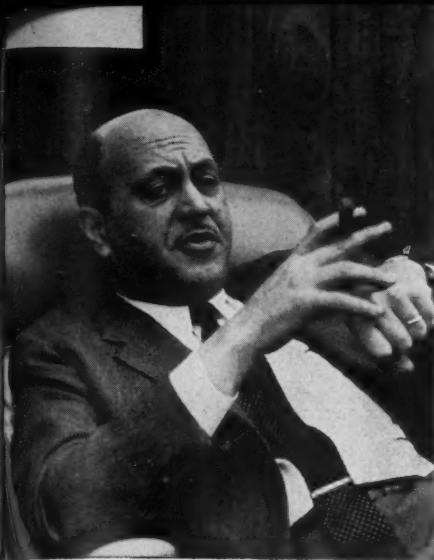
To Weaver, these people represent the largest untapped market for housing that can be tapped by reducing credit costs. The federal government has no control over construction and land costs or local property taxes. But it believes lower monthly credit costs could put adequate housing within the reach of lower-middle income families.

• **40-Year Mortgages**—For the upper level of this group, the Administration wants to experiment with 40-year, no-downpayment mortgages insured by the Federal Housing Administration. People in this income group could buy their homes anywhere—city or suburb. To attract lenders into buying the mortgages, the Kennedy Administration wants to provide cash payments in case of default—as Veterans' Administration now offers—instead of the debentures with which FHA normally pays off.

"As an economist," Weaver admits, "40-year mortgages cause me pause, but from the point of view of mores, they make sense."

To the fear that many families would never wind up owning their homes under such mortgages, Weaver answers: "This is not a program to encourage home ownership, but to provide housing for people at a price they can afford."

• **Special Loans**—For rental and co-op housing for families below this level, the Administration feels there only can



"To get middle-income people back, we must make the central city more attractive."

More

be long-term, low-interest mortgages financed by the special assistance fund of the Federal National Mortgage Assn. (Fanny Mae). Kennedy has not said how much money he would ask for. Fanny Mae would lend the money to cooperatives, non-profit associations, limited dividend corporations, and public housing authorities. They would build the apartments, rent them to persons with certain incomes.

Below this level are the families who can be sheltered only by public housing. For them Kennedy is trying to invigorate the public housing program. In addition to asking for another 100,000 units that were originally authorized in 1949, he wants cities to have greater freedom in changing eligibility requirements and in getting away from high-story projects if they want to.

II. Urban Renewal

Although the programs for low- and lower-middle income families are aimed at particular people—no matter where they live—the Administration also is pushing proposals aimed at the welfare of cities. Their primary aim is to put America's cities in better shape and prepare them for the growth ahead.

The Administration's urban renewal policy is, basically, to speed and broaden existing programs without introducing any new principles.

• **More Money**—As far as money is concerned, the President wants to give the cities about what they asked for: \$2.5-billion over four years. This compares with \$2-billion that Congress has authorized since 1949. (Of this, \$1.9-billion has been earmarked, only \$400-million actually spent.)

These funds represent the federal government's share of the loss that it and cities absorb when slum land is acquired and resold at a cut price to developers. The federal government makes up two-thirds of the loss and the cities one-third.

• **More Flexibility**—The Administration recognizes, however, that it will take more than these grants to quicken and expand urban renewal. Particularly significant are two actions that would answer many a city's prayer without raising costs to taxpayers:

• It will ask Congress to permit cities to set aside more of their urban renewal areas for nonresidential use. Originally, Congress considered urban renewal as a housing measure. With reluctance, it later gave in slightly to requests from cities that wanted to strengthen their economies with industrial development on cleared slum land.

• It has shifted personnel in FHA district offices so that applications for FHA insurance for homes in urban renewal projects are handled by new men more sympathetic to urban renewal. The old FHA staffers were accused of being too much oriented to single-family housing in the suburbs, and not flexible enough to deal with apartments on old slum sites.

The Administration did not go so far as some cities wanted—to set up a separate mortgage insurance operation for urban renewal. "We've got one bureaucracy existing," Weaver says of FHA. "Let's try to adapt this. Besides, there is a conservatism in FHA that's good."

At the same time, he makes it clear that he will not tolerate excessive conservatism: "What's the use of charging insurance premiums when you don't take risks? You only insure risks, not sure things."

III. Metropolitan Problem

In concerning itself with the health of central cities and the ability of lower-middle income families to buy homes in the suburbs, the Administration did not overlook a problem encompassing both: the metropolitan problem.

The Democrats returned to power after a decade in which the bulk of the nation's population growth took place in metropolitan areas—and particularly in their suburbs. With the proliferation of municipalities and the settlement on unincorporated land there frequently has been an uneven distribution of government services—too many governments and not enough government.

The federal government cannot directly do much about this chaos, and local voters invariably have rejected efforts to erase boundaries and create large metropolitan areas.

• **Planning Grants**—What Washington

can do, though, in a limited way is to dangle a carrot, and this the Administration proposes to do. It seeks to lure the component parts of metropolitan areas into collaborating on planning at least by holding out grants for planning and for the acquisition of open land.

A program of grants for urban and metropolitan planning already exists, but Kennedy would raise the amounts from \$20-million to \$100-million.

To get in on the brand-new land programs, cities would have to have comprehensive metropolitan or regional plans. First, Kennedy would provide \$100-million in 20% grants to help public bodies finance the reservation of land as permanent urban open space in the form of parks and other facilities. Second, he would let urban renewal loans be used to help local agencies finance the acquisition of open space for future public or private development.

Clearly, this seems only to be the beginning. "Sooner or later," says Weaver, "we'll have to come to grips with the zoning problem. But we're not ready yet."

IV. New Cabinet Post

Pres. Kennedy concluded his housing message with the assurance that he soon would offer specific proposals for the first new Cabinet department in eight years, the Dept. of Housing & Urban Affairs, which he had promised to establish during the campaign.

• **Municipal Frustration**—City officials have been particularly frustrated by the conflicts and lack of communications among various federal agencies that they must deal with. They cite the trouble the Urban Renewal Administration has had with FHA or the failure of the housing and highway agencies to work together on projects where they impinge upon one another. A Secretary of Urban Affairs, they contended, would be able to help get heads knocked.

Kennedy has not yet said what functions ought to be assigned such a department, but his message appeared to confirm speculation that, essentially, it would revolve around Weaver's Housing & Home Finance Agency, with few—if any—other roles.

• **Choice of Secretary**—Many have assumed from this that Weaver would head the new department, becoming the first Negro Cabinet member. However, best indication now is that the President considers Weaver a housing man and wants him to be Under Secretary of Housing.

If the President seeks someone with a broader background than Weaver's, a mayor is a likely choice. Among the possibilities are Richardson Dilworth of Philadelphia, Raymond R. Tucker of St. Louis, Richard Lee of New Haven, and Ben D. West of Nashville.

Steel Upturn Is on Dim Horizon

Sooner or later, the steel business will get a distinct—although not terribly substantial—pickup because thousands of U.S. manufacturers will find, suddenly, that they don't have enough of the most plentiful industrial material of all. You can now foretell what will happen (chart). The question is when. As of today, June seems the best guess.

At present, however, steelmakers shy away from predicting a production pickup any more vigorous than that which has been inching up the operating rate since the turn of the year. • **Discreet Silence**—There's a particularly pointed reason for this attitude, of course. For a year, the experts have been guessing wrong about steel's future, and they're understandably reluctant to stick their necks out. But now that steel inventories are so low that any upturn in the economy will be reflected immediately in increased steel orders, steelmen tend to be hopeful that a turnaround isn't far away.

• **Autos No Answer**—Regardless of whether a meaningful spring pickup in auto sales is getting under way now (BW—Mar. 11 '61, p. 25), Detroit isn't going to be steel's salvation before fall. It's steel's best customer and for 60 days it has been steel's biggest disappointment. Now, with 1-million autos still in dealers' hands and the 1961 model year rapidly running out of time, steelmen tend to feel that Detroit simply isn't going to inject enough additional steam into their business to turn it around before something else does.

Actually, on the basis of January steel shipments, you can cipher out the interesting, if academic, fact that steel's operating rate right now would be two points higher if Detroit were producing cars at the modest rates it maintained in the first couple of weeks in January. Figures on the February shipments, available a month from now, will look a lot sicker, but what's happening this week in Detroit is a lot more definitive. This week, Detroit has thousands more on layoff. For Pittsburgh this means another lost week in a fast-ebbing automotive shipping season—hence, a continuation of steel's automotive inventory problem, whether that be in unfabricated raw steel or in unsold finished steel cars.

I. What's the Pusher?

What is it, then, that induces even a smidgen of restrained optimism that steel may reach a significant bounce in its operating rate by the end of June?

The answer in two words, believe it or not, is inventory rebuilding. This is pretty remarkable, because over the

past year, the words "steel inventories" have come to have almost disgusting connotations in steel. For 15 years, in fact, they've been the industry's prime mischief-maker.

Still, if something is going to shatter steel's 1961 pattern—a slow, tedious, fairly hesitant upward creep—it will be modest inventory rebuilding by all the thousands of U.S. fabricators who, for various reasons, have been living hand-to-mouth for months off very fast deliveries, or who haven't been buying at all while they pulled down stocks.

• **Process**—Here's how it will happen: At a certain operating level—probably between 60% and 65% of 1960 capacity—steel will lose its ability to make the very rapid deliveries it has made routinely over the last three quarters. The first place this will happen will be in the light flat-rolled products. The reasons for this are that they make up about 45% of all steel products shipped, that they enter many different markets, and that they all must flow through the same equipment—steel's hot sheet mills.

When that point arrives, steel's lead times will begin to lengthen. They won't double overnight, of course. Not all products will be affected. The rate at which lead times lengthen will vary between products. And the impact may be selective. Depending on timing, Detroit requirements will either intensify the shift or mitigate it.

HERE'S WHY STEEL WILL MOVE UP — SOMETIME!

IF A MANUFACTURER . . .

Now produces 100 units per day
Which consume 100 lb. of steel per unit
And steel deliveries are 21 days

His minimum inv. needs are 210,000 lb. of steel

But if steel deliveries lengthen one week, he . . .

Still produces 100 units per day
Which consume 100 lb. of steel per unit
But steel deliveries are 28 days

So minimum inv. needs become 280,000 lb. of steel

If concurrently he raises production 5%, he . . .

Now produces 105 units per day
Which consume 100 lb. of steel per unit
And with steel deliveries 28 days

Minimum inv. needs become 294,000 lb. of steel

This indicates how, very rapidly . . .

STEEL CAN EXPECT A SMART BOUNCE IN OUTPUT

©BUSINESS WEEK

In short, this switch won't necessarily be highly and quickly visible. But when it happens, quite a few people will find that, simply in order to insure present levels of production, they will have to order more steel than they have been. That fact, in itself, will extend lead times further.

And if many fabricators are raising their own production, however slightly, that too will affect lead times.

• **Classic Market Reversal**—What's coming, then, is a junior-grade version of the classic market reversal that several times since World War II has snowballed to a point at which the steel market moved rapidly from a satisfyingly high level of production to an oversold scramble.

It won't even get close to a scramble this year. By postwar standards, the forthcoming inventory restoration will be small. It will get no impetus from price-hedging and none from strike-hedging for some months.

Steel's upcoming inventory turnaround, in short, will be born as they all have been—of an imbalance. Only this time the imbalance will be too little steel in customers' hands.

II. What Lights the Fuse?

When you nudge steelmakers as to the timing of all this, the responses range from an officer who's "hopeful"



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that steel will be at 60% by the end of the second quarter to a man who figures the second quarter could average between 65% and 70%—10 to 15 points higher than it has been in recent weeks. The latter figures it this way:

- Construction always helps steel at this time of year. Its full impact in 1961 is still to come.

- Cyclical strength may be due shortly. If the economy is on the verge of an upturn, it could add three to five points to steel's operating rate.

- If the predictable seasonal (construction) factor has a marked impact on steel, or if the seasonal and the cyclical influences both contribute medium impact, they'll force the operating rate up to a point at which lengthening lead times could add a couple of points by itself.

- Price Rise?—Still another intangible that could affect this snowballing is the possibility of a price rise. The subject has been deceptively quiet for months.

"We think about prices every day," says one Pittsburgh vice-president. "Our trouble is we can't do anything about them."

III. Earnings Problems

Whatever happens to steel prices and whenever the operating rate breaks out of its snail-like climb, you may be sure you haven't heard the last of the bad news from steel. There will be a real wave of it when first-quarter earnings statements start to appear.

"Right now I'm almost positive none of the top companies will earn their first-quarter dividends," says one man.

- Pressure—If that prediction is even approximately correct, it puts real pressure on the second quarter. A modest pickup might enable quite a few companies to earn their second-quarter dividends, but it will take more than that to make up what they figure to miss in the first.

"This is the first time in years," says one financial officer, "that we haven't covered cost increases with price increases. This quarter we're getting the full impact of the wage increase and it's biting hard right now. It isn't fatal, and it wouldn't take too much to heal the wounds. But until something happens to change things, there's going to be some bad news for people to swallow."

- Target—There's a striking similarity between the operating levels at which most producers can be expected to earn their dividends and those at which steelmen figure lead times would raise the operating rate significantly.

Educated guessing puts each somewhere between 60% and 65%—a target steelmen either hope or expect to reach by the end of the next quarter.

First Claim for Overcharges

Government agencies join in suing five electrical equipment makers for double or triple damages. They're asking \$12-million, and this suit may be only the beginning.

The Justice Dept. this week filed the first of what is sure to be a long string of damage suits based on its successful prosecution of price-fixing and bid-rigging charges against the electrical equipment industry.

In this initial civil action, five government agencies and the Tennessee Valley Authority asked the Philadelphia district court to award them about \$12-million from General Electric Co., Westinghouse Electric Corp., Allis-Chalmers Mfg. Co., Federal Pacific Electric Co., and I-T-E Circuit Breaker Co.

The Justice Dept. is acting for the Bureau of Reclamation, Bonneville Power Administration, Corps of Army Engineers, Atomic Energy Commission, and Southwestern Power Administration, as well as TVA, whose claim is being treated separately.

- Triple or Double?—TVA is suing for \$7,478,691, or three times its alleged actual damages of \$2,492,897. The others—direct federal agencies—could only sue for double damages, amounting to \$4,421,372. The legalities involved are complex. Under the Sherman Antitrust Act, the government can only recover actual damages; private parties can claim punitive triple damages.

In the case of TVA, Justice Dept. attorneys are claiming it is a non-governmental though government-owned corporation and so entitled to triple awards. The other agencies are seeking double damages under another law, the False Claims Act. Just in case the court disallows either the triple or double damages, alternative suits for single damages were also filed in each case.

- How Much Too Much?—This week's suit gives the first indication of how the government intends (1) to proceed against the 29 corporations involved in the criminal action and (2) to fix the damages claimed for overcharges by the manufacturers.

The government says overcharges amounted to 40% of the prices paid. This is based on comparison of prices paid during 1956-60, with those paid from August to mid-November in 1958, when the Justice Dept. says the "defendants most nearly approached those prices that would have prevailed under conditions of open competition."

This formula is at least a starting point for other federal agencies as well as for privately and publicly owned utilities and for other customers in es-

tablishing their damage claims. Most utilities are compiling data to see what, if any, claims they should file (BW-Mar. 4 '61, p. 20). The National Institute of Municipal Law Officers may file a joint suit covering a large number of cities.

The fact that the government's suit included companies that pleaded nolo contendere points to a wide-ranging attempt by Justice to recover damages. It will have to prove conspiracy on the part of companies that pleaded no contest (Federal and I-T-E), but apparently it intends to include all the 29 companies in its damage suits.

At the moment, the Philadelphia court docket is crowded and it may be 24 to 30 months before the court gets around to hearing this first case. No out-of-court settlement is likely.

- Company Position—Even before the initial suit was brought, the companies stated they would fight any damage suit brought against them. They repeated that intention this week. They insist there is no evidence that either the government or private utilities actually were overcharged, even though they have admitted there was a price-fixing conspiracy.

Partly this is based on the fact that electricity rates to consumers have held steady while other prices have skyrocketed. This wouldn't have been possible, say the companies, if the manufacturers had not given fair value to utilities.

As GE put it: "This government suit will, of course, be vigorously defended, since an exhaustive audit of most of the transactions involved is confirming that the purchasers of electric apparatus have received fair value by any reasonable standards." Allis-Chalmers made a similar statement. But both Allis-Chalmers and GE, along with Westinghouse, still stand ready to negotiate any adjustments out of court, if evidence shows damages to a customer.

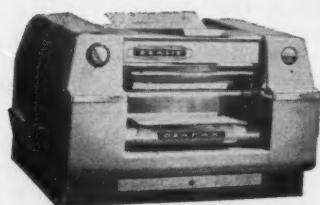
Guesses on the total civil damage bill spread all the way from the companies' position of little or none to one estimate of \$1-billion.

- One Down—One big claim was tossed out this week when a Peoria (Ill.) judge dismissed a \$750-million suit against GE brought by a couple "in behalf of 50-million consumers." GE termed the suit "fantastic" and "a bid for dramatic publicity." It pointed out that consumer products weren't involved in any way in the antitrust case.



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Southern Tier Transcontinental Route

Awarded to Delta and National by CAB

The Civil Aeronautics Board handed out its last major route plum when it granted authority to National Airlines and Delta Air Lines to provide transcontinental service across the southern tier of the U.S. Unless it is upset in the courts, the decision will end a long and acrimonious fight for the routes, involving eight of the 12 domestic trunk lines.

The CAB ruling gives National a two-leg extension of its Miami-New Orleans-Houston route—to San Francisco via Las Vegas and to Los Angeles via San Diego. Delta, which operates out of Atlanta, gets the same extensions, but from its Dallas terminus.

The ruling follows the CAB pattern of trying to narrow the gap between the smaller trunk lines and the Big Four, three of which—American, Eastern, and Trans World—also applied for the transcontinental route.

. . .

FTC Slaps Down Oil-Tire Company Deals, Charging Coercion, Illegal Commissions

The Federal Trade Commission has struck down contracts between two oil companies and two rubber companies for the sale of auto tires, batteries, and accessories (TBA). The commission ruled that:

- The oil companies coerced dealers into stocking only specified TBA brands.
- The "override" commissions paid by tire makers to oil companies were illegal even without the factor of coercion of dealers.

Separate FTC rulings assailed the legality of agreements between Goodyear Tire & Rubber Co. and Atlanta Refining Co., and Firestone Tire & Rubber Co. and Shell Oil Co. A third complaint—against the B. F. Goodrich Co. and Texaco, Inc., was sent back to the hearing examiner on the grounds there was not enough evidence for a ruling.

Under the contracts, the rubber companies provided the oil companies with TBA, and paid an "override" commission of 7½% to 10% to the oil companies on TBA sales.

. . .

Senate Group Urges Overhauling Of Conflict-of-Interest Laws

A Senate subcommittee this week called for overhaul of the "disjointed, overlapping, ambiguous, and improperly focused" conflict-of-interest laws. But it left specific suggestions up to an advisory panel due to report to Pres. Kennedy later in the week. The President has scheduled a message to Congress on the subject later this month.

The report of the subcommittee, headed by Sen. Henry M. Jackson (D-Wash.), pointed to various flaws in the seven conflict-of-interest laws, some of which had their beginnings in Civil War times:

- Draconian requirement—mostly by the Senate Armed Services Committee on its own hook—that government appointees divest themselves of stock holdings.
- The rule that prevents the hiring of retired military officers unless they waive their retirement pay.
- The rule that prevents civilians in government from continuing to participate in the retirement plans of their former private companies.
- Restrictions on the hiring by government of part-time consultants already on private payrolls.

. . .

New York Legislators Move to Reverse Court's Upset of State Banking Law

New York banking circles were thrown into a tizzy this week when a state Supreme Court justice declared the 1960 Omnibus Banking Law (BW—Mar.26'60,p32) unconstitutional on a legal technicality.

It was this law that for the first time allowed New York City banks to expand into the suburbs, and set up state control over bank holding companies. The court action had immediate impact:

- At least one big bank, Chemical Bank New York Trust, canceled the scheduled opening of a suburban branch.

• Shares of New York City banks dropped in active trading, while prices rose for the suburban Franklin National Bank of Long Island, which had brought the suit to invalidate the law.

The court ruling, which puts in doubt a number of pending bank acquisitions, does not appear likely to stand for long, despite all the concern it aroused. A move is already under way in the state legislature to pass a "validating act" that would in effect nullify the court decision and restore the Omnibus Banking Law. If this fails, both the state Banking Dept. and the banks affected are certain to appeal.

. . .

Billion-Dollar Military Plane Order May Give Lockheed Civilian Jet, Too

This week's award of a \$1-billion contract to Lockheed Aircraft Corp. for 100 military jet transports seems likely to bring a new commercial cargo plane into competition. Although designed to move troops and material, it should be readily adaptable to civilian use.

The award surprised the industry, both in its timing and in the selection of Lockheed. A decision had not been expected for a month or so, and insiders had been betting that the award would go to Douglas Aircraft Co., Inc., which has been running out of work.

The new plane will be a high-wing craft with turbofan engines, a speed of 525-575 mph., and ability to take off, fully loaded, within 6,000 ft. It will have loading doors at truck-bed level and a rear door the full width of the hull, for air-drop of bulky cargo.

A new plant in Puerto Rico might out-produce your plant at home

Many U. S. manufacturers are finding that their plants in booming Puerto Rico out-produce their mainland plants. One firm's new plant produces twice as many units per man day as its plant at home.



Puerto Rico's skillful workers quickly master intricate jobs

THE PUERTO RICAN girl in our picture is assembling a most delicate instrument. It measures blood pressure *inside* the heart.

You couldn't find a better instance of the exacting work that Puerto Ricans are now performing for U. S. industry. These workers are astonishingly clever with their hands. And quick to master intricate jobs.

One precision manufacturer's Puerto Rico plant went ahead of his operation on the mainland, in production per man-hour, only ninety days after work started.

And a U. S. electrical equipment manufacturer says his workers soon equal the hourly output of workers in his mainland plant—with only half as many rejects.

Fifty U. S. owned plants are in Puerto Rico making complex electrical and electronic equipment.

If you were to open a plant in this booming Commonwealth, you could choose from many thousands of skilled workers.

And the government can even train workers exclusively for you, if your operation calls for highly specialized skills.

1. Remarkable productivity. A study of productivity of Puerto Rican labor in sixty-one plants is now completed. These plants represent ten per cent of U. S. factories in Puerto Rico and account for about 17 per cent of industrial employment in all U. S. plants on the island.

In the majority of plants, physical productivity, units per man-day, is equal to or better than comparable mainland plants.

The top ranking plant is in the metal-working group. Its productivity is double that of a comparable plant on the mainland. The top plant in the plastics industry is 25 per cent ahead of the mainland. In electrical equipment, the top factory is 20 per cent ahead of mainland standards. Puerto Rico's weakest showing is in the leather industry, where the top plant's productivity is equal to mainland standards.

2. Two new U. S. plants a week. Over 600 U. S. factories have opened in Puerto Rico during the last decade. Sixty-two U. S. firms have expanded their Puerto Rico operations to two or more plants—and one company already has eight manufacturing subsidiaries in Puerto Rico. The pace gets livelier each year. In fiscal 1960, eighty-eight new U. S. plants began operations on the island. And U. S. manufacturers are now signing up at a rate greater than two a week.

3. No "runaway" plants wanted. Only genuinely new or expanding operations qualify for Puerto Rico's ten-year tax holiday. Puerto Rico does *not* grant tax exemption to plants that run away from the United States.

4. New pattern for big industry. A pattern of integrated industry is beginning to emerge in Puerto Rico. The

island's largest oil refinery is now providing raw materials for Union Carbide Caribe, a new \$39,800,000 petrochemical plant near Ponce. This plant is now expanding to nearly double its present size.

Another U. S. complex, centered around a \$5,800,000 flour and feed mill, includes three tuna packing plants valued at about \$6,000,000, a \$2,500,000 meat packing plant, and a \$15,000,000 fertilizer industry.

5. After ten years, plants stay on. Fifty-nine U. S. factories have reached their tenth year in Puerto Rico; thus they have come to the end of their one hundred per cent tax holiday. Fifty-one of the fifty-nine plan to continue operating in Puerto Rico.

6. Puerto Rico associated with U. S. Puerto Rico is a self-governing Commonwealth within the American Union. Property is safeguarded under the Constitutions of *both* the United States and Puerto Rico. The U. S. dollar is currency. No passports are needed. Money, people, and goods move to and from the U. S. without red tape or tariffs. U. S. manufacturers run their plants under commercial laws and practices that are familiar to them.

For full details on Puerto Rico's many advantages as the place to locate your new or expanded plant operation, write Mr. Alex Higuera, Commonwealth of Puerto Rico, Economic Development Administration, Dept. B-3, 666 Fifth Avenue, New York 19, N. Y. Or get in touch with our offices in Miami, Philadelphia, Boston, Chicago or Los Angeles. In San Juan call Gabriel Rivera Hernandez at San Juan 3-0040.

New "Pushbutton Theater" for Harvard



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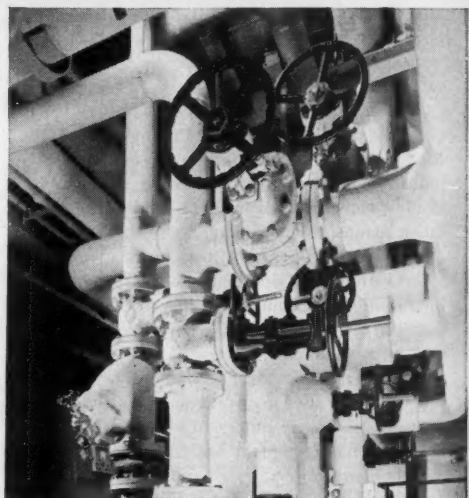
Architect: HUGH A. STUBBINS & ASSOCIATES, CAMBRIDGE, MASS. *Plumbing & Heating Engineer:* DELBROOK ENGINEERING, INC., CAMBRIDGE, MASS. *General Contractor:* GEORGE A. FULLER CO., NEW YORK, N. Y. *Plumbing & Sprinkler Contractor:* C. H. CRONIN, INC., BOSTON, MASS. *Heating, Ventilating & Air Conditioning Contractor:* THOMAS G. GALLAGHER, INC., SOMERVILLE, MASS.

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In the new Loeb Drama Center you push a button, get a conventional, Broadway-type stage. Push another, an "apron type" stage for Elizabethan drama. Push a third — and *voila* — you have modified "theater-in-the-round!"

This well may be the finest, the most versatile and responsive theater in history. One thing is sure: its builders, architects and engineers insisted on *practicality* along with the stuff of which theatrical dreams are made. They specified Jenkins Valves throughout the building for the entire complex of heating, piping and air conditioning lines.

To the men who design, build and operate America's distinguished buildings, the specification "JENKINS" is a trusted protection against costly valve maintenance and replacement. And they commonly provide this protection, knowing that Jenkins Valves *cost no more*. Jenkins Bros., 100 Park Avenue, New York 17.



Jenkins Iron Body Gate Valves in the theater's piping system

JENKINS
LOOK FOR THE JENKINS DIAMOND
VALVES



Sold Through Leading Distributors Everywhere

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
MAR. 18, 1961



A business upturn next quarter, if it occurs, will change the Washington picture.

Kennedy's program will be hurt.

Conservative opposition to many of his ideas will gain.

Issues that are now quiet—such as Democratic criticism of the Federal Reserve and the 4¼% ceiling on long-term Treasury Bonds—will come to life.

It's Administration doctrine that business will turn up.

Three Cabinet officers are on record as expecting that—Dillon of Treasury, Hodges of Commerce, Goldberg of Labor.

This is a turnaround from only a few weeks ago when the stress was on the dark side. The word from the White House now is to strike a more cheerful tone.

There is evidence to support the new optimism. This week government experts found a glimmer of hope even in the unemployment figures (page 19), adding it to previous signs of improvement in retailing, carloadings, and construction.

But the evidence is not strong enough to explain the switch in the Administration line. It's notable that the most cautious words about a business rise are from Walter W. Heller, chairman of the President's Council of Economic Advisers. Professional caution still prevails there.

What's happened is that Pres. Kennedy is switching tactics in his approach to Congress.

Republicans said right along that Kennedy exaggerated the severity of the recession to create a mood of crisis in Congress, in the hope of getting his programs through with a rush.

But Congress is taking its own time. Though legislation is moving at a steady pace through committees, the "recession crisis" approach didn't set a fire under lawmakers.

The new White House approach will stress the long run—the possibility that the spring upturn will be too weak to start the economy growing and the importance of a swifter rate of growth if unemployment is to be reduced to a politically acceptable 4%.

It will lead to a head-on clash in Congress over fundamental issues, with less bickering over the reading of recession statistics.

The uneasy truce existing between Democrats in Congress and William McC. Martin, Jr., chairman of the Federal Reserve Board, may end if business begins a sustained rise.

Every move by Martin will be watched critically by a new subcommittee of Congress to be appointed by Rep. Wright Patman (D-Tex.), chairman of the Joint Economic Committee.

Patman will name Rep. Henry S. Reuss (D-Wis.) chairman of the subcommittee that will study the whole balance-of-payments problem, includ-

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
MAR. 18, 1961

ing the gold flow and U. S. interest rate levels. Both Patman and Reuss are believers in low interest rates and have criticized Martin in the past when he tightened credit following recessions.

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Kennedy acknowledged that his program is in trouble at his press conference this week. He told reporters that "interest groups" have managed to stir up mail against some of his ideas, particularly the minimum wage increase.

Kennedy is planning a series of TV broadcasts partly to counter this mail campaign.

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A Republican drive to win more big city voters is getting under way.

Victory next year in the Congressional elections is the first goal.

Beyond is the big prize—the White House in 1964.

GOP strategists are convinced they have to slash into the big city machines of the East and Midwest to beat Kennedy in the next national election.

National Chmn. Thruston B. Morton leads the campaign with the help of Ray Bliss, Ohio state chairman, and a committee of top Republicans. In last year's election Bliss cut down Democratic majorities in the cities enough to put Ohio in the Republican column.

The first step will be a detailed analysis of urban voter blocs by race, religion, and economic classes. Model studies, already completed for New York, Newark, N. J., Columbus, Ohio, and San Francisco, were shown to the committee this week in Washington. Others will be made for such cities as Boston, Philadelphia, Baltimore, Pittsburgh, Cleveland, Buffalo, Detroit, Chicago, St. Paul, Milwaukee, and St. Louis.

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Commerce Secy. Hodges is courting labor along the same lines used by Labor Secy. Goldberg to try to win friends among businessmen.

Hodges has named Hyman Bookbinder, veteran AFL-CIO lobbyist, as a special assistant to advise on labor problems. Hodges also stepped into a threatened union boycott of Japanese-made radio and television parts in Chicago by inviting the union president to Washington for a conference. Hodges won a 90-day postponement of the boycott threat. Next, Hodges may try to stall a threatened union boycott of foreign textiles.

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Rumblings about a Kennedy dynasty are heard again with appointment of the President's brother-in-law, Stephen E. Smith, as a Development Loan Fund consultant. Brother-in-law Sargent Shriver heads the Peace Corps and brother Robert F. is Attorney General.

But plans for another Kennedy relative—younger brother Edward—don't include a shot at the Senate in 1962 as some had surmised. When Benjamin Smith was appointed to a two-year Senate term from Massachusetts it was thought he might step aside in favor of Edward next year. Now Smith is getting ready to run for the job himself and Edward will make his start further down the line.

MARKETING

New interior wall paint for do-it-yourselfers has a creamy consistency and doesn't run or splatter. Du Pont plans a big promotion, new marketing strategy to put Lucite over.



Du Pont Grabs for Paint Sales

E. I. du Pont de Nemours & Co. has earned itself the dubious title of sleeping giant in the paint industry. For years a leading supplier of industrial paints, it has held a relatively weak spot in the consumer field.

Du Pont is going all-out to change this. It has set its cap for a large portion of the consumer market. This week, it introduced what it calls "the tool to pry open many doors."

• **Primary Target**—That tool (picture) is the newest member of the du Pont Lucite family of paints. Du Pont calls it "a natural for the do-it-yourselfer," and that's the target it is shooting for primarily. Lucite's most obvious asset: a minimum of mess. It has a creamy consistency, about the same as mayonnaise. It doesn't drip, run, or splatter.

To prove its intentions are strictly serious, the company is backing its Lucite with a promotional drive of several million dollars, "the largest advertising campaign ever put behind a paint product in the history of the industry," a spokesman says.

Aside from the usual newspaper, TV, and magazine blitz—with special emphasis on television—du Pont has a marketing plan up its sleeve. It's not talking much about this right now, other than to say the plan "will enable us to increase our market penetration threefold."

• **Expanding Dealerships**—Obviously, though, this strategy revolves around

dealerships. The company says it has been very conservative on dealer franchise protection. Often it has refrained from setting up two dealerships even in a town big enough to support two. "We can no longer afford to be so paternal about it," du Pont says, "and we're not going to keep doing it."

This represents quite a turnaround in du Pont's position. The competition has a stronger word for du Pont's consumer paint distribution than "conservative." They describe it as from weak to poor, outside of some limited areas where it is entrenched. Trade gossip also has it that du Pont's consumer line is now under the gun: either to get going in a big way or get out.

I. The Challenge

Du Pont is not the only paint producer that is dissatisfied with the progress of recent years. True, the industry hit record sales in 1960—nearly \$1.8-billion at factory level, up 3.2% from 1959 (these figures include varnish and lacquer). But, says Paul W. Neidhardt, director, and vice-president of the Paint Div. of Glidden Co., paint has not kept pace with the U. S. economy during the past five years.

• **Market Categories**—The paint market breaks into two major categories: consumer and commercial (the so-called trade sales), and industrial. The industrial market divides about evenly, says

Pittsburgh Plate Glass Co., among automobiles, other industrial product coating (such as for appliances), and construction and maintenance.

Trade sales have some appealing pluses. They get the lion's share of the dollar volume (over \$1-billion of the \$1.8-billion total). And they are more profitable. They accounted for 51.9% of total production in gallons last year, and some 58.2% in dollars.

• **Sluggish Sales**—In the industrial area, some of the chief markets have shown little or no growth over 1955. Detroit has yet to duplicate its record of that year. And the fabricated metal products index has risen less than 10% since then, Glidden reports.

At giant Sherwin-Williams Co., whose claim to top spot appears to go undisputed, Robert H. Hill, director of sales, cites a couple of other reasons for paint's relative stodginess: competition from new materials that don't require paint, and improved paints that stretch farther, last longer.

• **Competitive Pressures**—The structure of the industry opens the door wide to competition. Ten companies have 50% of the consumer paint market, by du Pont's count. (This would include Sears, Roebuck & Co.'s brand.) But the rest is divided among some 1,200 or more manufacturers, local and regional. An aggressive, relatively small company can move in fast, often by selling on price. Many in the trade would put price



Fall River Line Pier, Inc. installs new

TOLEDO ELECTRONIC TRUCK SCALE

with **PRINTWEIGH "400"**

"speeds up weighing, provides accurate printed weights"
says William J. Torpey, General Manager

"Truck weights up to 50 tons are instantly transmitted *electronically* from the full-length 60' scale platform to the weighing head located in the pier office. There, the weight records are automatically printed in triplicate on certified weight tickets. Our Toledo Printweigh "400" eliminates human error, speeds weighing and assures more accuracy than ever before on any scale, to trucker and customer alike."

TOLEDO's complete truck scale line gives you a full choice of capacities and platform sizes in mechanical or electronic type scales. Printweigh recording on forms, tickets or strips may be at the scale or a remote location. Many more advanced TOLEDO features are offered to speed weighing, eliminate human error. For full details, write for Bulletin 2417, TOLEDO SCALE, Division of Toledo Scale Corporation, Toledo 12, Ohio. (Toledo Scale Co. of Canada Ltd., Windsor, Ontario)



TOLEDO

Greatest name in weighing

competition at the top of the list of industry problems. Mary Carter Paint Co., for one, has not endeared itself by its practice of regularly offering one can of paint free for every can sold. The Federal Trade Commission last week charged Mary Carter with deceptive advertising claims. Mary Carter says it will fight the charges; it is countering with a suit against the National Paint, Varnish & Lacquer Assn. "The industry doesn't like us, but our customers do," says an official of the company.

• **Profusion of New Products**—To these problems, du Pont would add some more. One is the proliferation of new products in recent years. Du Pont cites the paint association in saying that 90% of the paints now being used weren't on the market five years ago.

For industrial uses, this is inevitable. Each application calls for a special formula. In trade sales, the big development has been the emulsions—paints in which water replaces the traditional solvent as a thinner. The emulsions ushered in a raft of paints using other vehicles than oil—the latex paints, with rubber, vinyl, or acrylic bases, such as Lucite. Starting as indoor wall paints, the latex paints have come out in forms for outdoor use in the last couple of years. They dry faster, have less odor, and are less hazardous.

• **Buyer Confusion**—The net result of this influx, says du Pont, is confusion, for the consumer, and even to a lesser extent for the retailer. Consumers buy the wrong product for a particular application, then get sore when it doesn't work. Or, its competitors add, they buy an inferior paint, then damn the whole paint business when it doesn't work.

The phenomenon of the do-it-yourselfer compounds the problem. The unskilled painter is in a strategic position not only to pick the wrong product, but to botch the job. Further, home painters strongly object to the "fuss, mess, and bother" that their self-appointed task involves, du Pont surveys showed. And finally, as the industry has learned to its woe, do-it-yourselfers are not always careful to read and follow instructions.

II. Solutions

This explains why du Pont is excited about Lucite. With its "thixotropic" qualities, it spreads freely and smoothly under pressure of roller or brush. Du Pont feels it is a major improvement over previous dripless paints, which were generally hard to apply.

• **Picture Instructions**—In casting for a market, du Pont is wooing women especially. Women have always had a major say in choice of color. Du Pont found through its consumer surveys that

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M. H. Raven (right), Superintendent of Northern Natural Gas Company's underground storage compressor station near Redfield, Iowa, until his recent promotion, discusses the facts with H. E. Hansen, Shift Engineer. Compressor in foreground is GMWA-8, rated 2000 hp. Another similar unit is in the background.

Here's how you prove a compressor is really rugged

During its first year's operation, Redfield Station of Northern Natural Gas Company has been put through a rigorous test. According to M. H. Raven, Superintendent, "Our Cooper-Bessemer GMWA-8 Compressor and En-Tronic Control have responded round-the-clock to this program of normal loading, underloading and overloading with remarkable per-

formance. Despite abnormal loading, oil consumption and water usage have been very low. Inspection and cleaning after 12,000 hours showed all parts in perfect condition. It is a *rugged* machine!"

Call our nearest office for help in planning your compression and power facilities for unsurpassed dependability and economy.

Cooper-Bessemer

GENERAL OFFICES: MOUNT VERNON, OHIO

ENGINES: GAS - DIESEL - GAS-DIESEL
JET-POWERED GAS TURBINES
COMPRESSORS: RECIPROCATING AND CENTRIFUGAL



New Nest-A-Bin Bulk Containers Cut Handling Costs Up To 80%

Nest-A-Bin is a remarkable new development by Kaiser Industries to increase materials handling efficiency. These containers are specifically designed to meet all requirements for shipping, in-plant handling, storage and industrial distribution.

Saves Money. With Nest-A-Bin, fewer units do the job . . . reducing labor costs as much as 80% and simplifying inventory control. For example, one 550-gallon bin for liquids replaces ten 55-gallon drums . . . or one cone-shaped 70 cu. ft. bin for granulars, with an 11,200 lb. capacity, replaces as many as 100 bags.

Versatile. Nest-A-Bin comes in five different sizes designed for liquid commodities and two sizes for granulars. Containers may be ordered in aluminum, magnesium, stainless or carbon steel.

Easy to Clean. Nest-A-Bin opens quickly into two accessible units for fast, economical cleaning and inspection. Its sanitary design features smooth inside surfaces with no material-collecting corners.

Saves Space. When empty, Nest-A-Bins nest compactly, saving valuable in-plant space and shipping costs.

Free Nest-A-Bin Brochure. For information about how Kaiser Nest-A-Bin can increase your efficiency and help cut your costs, contact the national distributor: Howard Terminal Co., P.O. Box 857, Oakland 4, California.



women do many of the home painting jobs. To make sure that women do it right, the Lucite package carries pictures to show how to apply the paint.

Product multiplicity means more competition for outlets. To Pittsburgh Plate Glass, this means more intensified promotion, particularly to the consumer. Once the consumer is sold on a brand, it argues, it's easier to sell the dealer.

• **New Outlets**—More outlets can mean new types of outlets. Pittsburgh is now selling to some drug stores. The discount house is moving in. The bulk of consumer paints move direct from factory to dealer. But some go through jobbers. Sherwin-Williams says it is not altogether happy that some of its paints, moving through jobbers, wind up in discount houses.

The industry argues with itself as to whether more outlets should mean more owned stores. Sherwin-Williams is a strong exponent of the owned outlet; it has some 1,600, and expects to expand. Glidden is also increasing its own stores, now up to about 140. On the other hand, when du Pont sold its stores in 1956, it took the line that the independent retailer does a better job.

Proponents of the owned store acknowledge that such a setup may antagonize the independent retailer. But Sherwin-Williams emphasizes that a company operation can carry a lot of inventory. Both companies use it as a wholesale warehouse. Further, it can give more decorator advice than the traditional hardware store can.

• **Inventory Solution**—Several companies have found another partial answer to the inventory problem. This is the color mixer, which allows dealers to custom-mix right in the store to get just the shade the housewife wants. Retailers are enthusiastic, says National Lead Co.; with a minimum stock of basic colors you can get over 2,000 shades of its Dutch Boy paint.

On industrial paints, says Pittsburgh Plate Glass, the best competitive weapon is not so much promotion as research, development, and technical assistance.

• **Watchful Waiting**—If du Pont puts its huge resources into a major drive for the consumer field, the industry agrees this is competition to watch. They feel, though, that du Pont is working against the odds of inadequate distribution—a limitation the company admits. They will watch closely to see how the chemicals giant sets about building its channels. Lucite is a premium paint, costing from 80¢ to \$1 more than most consumer brands. But the trade isn't discounting the possibility that expanding penetration of the market could mean the discount house. If Lucite should go that route, it's a cinch that the other brands won't stay out. **END**

In Marketing

• • •

In the Legal Ring, Trading Stamps Score a Win, a Loss, and a Draw

It was win, lose, and draw for trading stamps in three Western states.

In Montana, the legislature enacted a law, which its sponsors call "kill 'em dead legislation," under which a store issuing trading stamps must pay a \$100 annual fee plus 2% of gross receipts.

In Idaho, Gov. Robert E. Smylie vetoed a bill that would have prohibited issuance of trading stamps except when redeemable in cash or merchandise at the store where they were issued. Smylie said this would allow large stores to use stamps but would be prohibitive for small ones.

In Washington, where a \$6,000 annual license fee has kept out stamps redeemable in merchandise, efforts headed by stamp company Sperry & Hutchinson Co. to lift this restriction died in committee.

• • •

FTC Sternly Asks Department Stores About Use of Advertising Allowances

Advertising allowances are up for scrutiny again.

Leading department stores across the nation will soon receive four-page questionnaires from the Federal Trade Commission. The big question: Have the retailers disobeyed the Robinson-Patman Act?

FTC is sending out the queries in an effort to determine whether 213 department and specialty stores have accepted illegal allowances or discounts from suppliers of wearing apparel. Similar questions will also go to 19 resident buyers representing department stores.

Answers are mandatory under Section 6 of the Federal Trade Commission Act. Robinson-Patman prohibits giving or taking of advertising or other promotional allowances when they are not made available to all buyers on an equal basis.

• • •

Washington Post Acquires Newsweek: Pays Over \$8-Million for Astor Interests

The Washington Post Co., publisher of the independent liberal Washington Post and Times Herald, next week takes over control of Newsweek magazine from the Vincent Astor Foundation.

In the resulting changeover, most of the magazine's editorial and business staff remains on the job, except for the Muir family. Malcolm Muir, Sr., a minority stockholder who had been board chairman, becomes a director and chairman of the executive committee. His son, Malcolm, Jr., who has been executive editor, has

been offered an executive job with the Washington Post.

Philip L. Graham, head of the Post, announced that Osborn Elliott, formerly managing editor, will be editor; Gibson McCabe will remain as president and publisher.

The Post paid between \$8-million and \$9-million for the Astor Foundation's 59% interest in the magazine. Other stockholders—including U.S. Ambassador-at-Large W. Averell Harriman, who owns about 12% of the stock—are being offered the same terms as the Astor Foundation.

Although Graham says there will be no changes in Newsweek policy, he is expected to spend a couple of days each week in New York to look after the Post's new publishing venture. The Post, although it supported Pres. Eisenhower in 1956 and failed to support either Vice-Pres. Richard Nixon or Sen. John F. Kennedy in 1960, is considered a liberal paper.

Herblock (Herbert L. Block), its editorial cartoonist, is a vigorous liberal. On the other hand, two of Newsweek's top columnists—Raymond Moley and Henry Hazlitt—are definitely in the conservative camp.

The Astor Foundation had been attempting to dispose of its holdings in Newsweek for sometime, with several buyers, including S. I. Newhouse, owner of the Newhouse newspaper chain, as well as a Newsweek management group, making offers.

• • •

Hat Council Unveils Jaunty New Design To Spur Lagging Sales to Men

The reconstructed male has been inclined to express his vitality, youthful spirit, nonconformity, and what not by going hatless in recent years. So market research tells us. Hat Council, Inc., representing some 40 hat manufacturers, band makers, fur cutters, and the like, is fighting back.

The hat pictured is its new weapon. Hat Council put its problem in the hands of Raymond Loewy/William Snaith, Inc., industrial designers. It asked for a new hat—different enough to be recognized as a departure, not so radical it would scare customers away.

Individual hat manufacturers have tried valiantly, and with some success, to spur hat sales by new styling. But production of men's fur felt hats wavers around 700,000 doz. to 800,000 doz. annually. Census figures record a dip between 1954 and 1958.

Any members of the council may use the new design for free, complete with the Loewy/Snaith signature. Explained Raymond Loewy, in unveiling the creation, "We wished to produce a shape that would, quite frankly, give the man a lift on seeing and wearing it."

Several hat manufacturers are already producing the new design for their fall, 1961, lines.



SPECIAL REPORT

The most ambitious effort yet made to control the growth and spread of atomic weapons gets under way in Washington.



DISARMAMENT policymakers surrounding the President include Dean Rusk (above left) who, as State Secretary, helps shape U. S. foreign policy; Defense Secy. Robert McNamara (above right), who backs Kennedy's arms control ideas; John J. McCloy (right), heads the organization that will develop the new policies.

ARMS CONTROL



The men pictured above are heading a major effort to find ways to ease the threat to the world posed by Russian and U.S. nuclear competition.

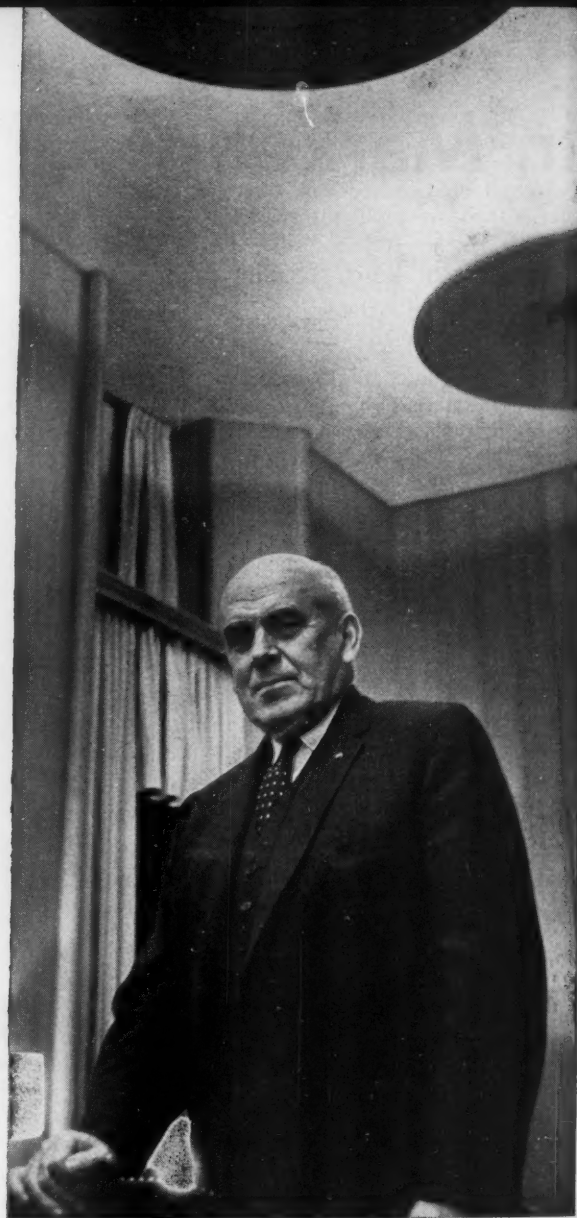
They are building on the basis of a lot of hard thought in recent years by scholars, statesmen, military men. The nature of that thought shows in the vocabulary it has evolved, a vocabulary sampled on page 64.

They start from the basic fact of a nuclear standoff between

the two great powers. The present military strength of the two is compared on page 68.

They are aided by the rapid growth of technical methods for checking and inspecting military forces all over the world, methods that are outlined on page 78.

Nevertheless, the crucial element is still the policy and strategy decisions made by the political leaders in this country and Russia. The prospects are analyzed on page 90.



1. Organizing for A

In his inaugural address, Pres. Kennedy called for beginning anew "the quest for peace, before the dark powers of destruction unleashed by science engulf all humanity in planned or accidental self-destruction."

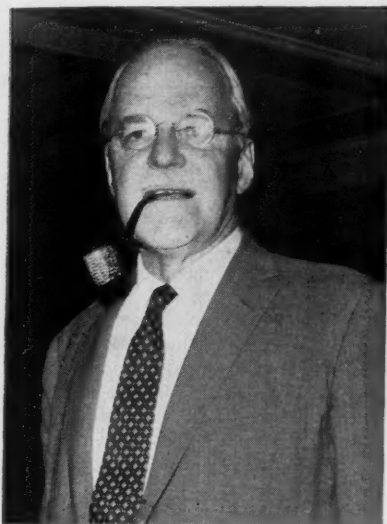
His actions since prove that this was not mere pious rhetoric. It is fair to say that he has launched the most intensive and serious search yet for answers to the riddle of how to move toward disarmament in the midst of the East-West power struggle.

To this big task, as an earnest of his sincerity, the President has assigned big men, starting with his disarmament adviser John Jay McCloy, eminent statesman, strategist, lawyer-banker.

• **McCloy's Job**—McCloy's assignment is to devise bolder and also more



PAUL H. NITZE, Asst. Secy. of Defense for International Security Affairs, will correlate strategy to national security.



ALLEN W. DULLES, director of Central Intelligence Agency, keeps tabs on Soviet military capabilities and plans.



GLENN T. SEABORG heads the Atomic Energy Commission, most of whose appropriation goes to nuclear weapons.



McGEORGE BUNDY advises Kennedy on implications of arms control, on bringing Congress into the thinking.



JEROME WIESNER advises the President on technical and scientific aspects of the arms control proposals.

oArms Control

realistic arms control and disarmament policy, and to fashion an effective governmental organization to develop and carry out this policy. In doing this, he is working closely with key men in the Administration—State Secy. Dean Rusk, Defense Secy. Robert McNamara, Asst. Secy. of Defense for International Security Affairs Paul H. Nitze, Atomic Energy Commission Chmn. Glenn T. Seaborg, Central Intelligence Agency Director Allen W. Dulles, the President's national security and science advisers McGeorge Bundy and Jerome Wiesner—and the President himself.

McCloy also is drawing upon the ideas of academicians and the experience and political wisdom of such Congressional leaders as Sens. J.

William Fulbright, Clinton P. Anderson, Hubert Humphrey, Rep. Chet Holifield, and others.

Imaginative Realist

It is generally conceded in Washington that the President could not have found a better man than McCloy to try to blend conflicting views and interests inside and outside the Administration into a coherent and realistic arms-control policy.

McCloy is respected by businessmen as the former head of the World Bank and as the chairman of the board of the Chase Manhattan Bank. Military men respect him for the job he did in World War II as Assistant Secretary of War and for having fought hard

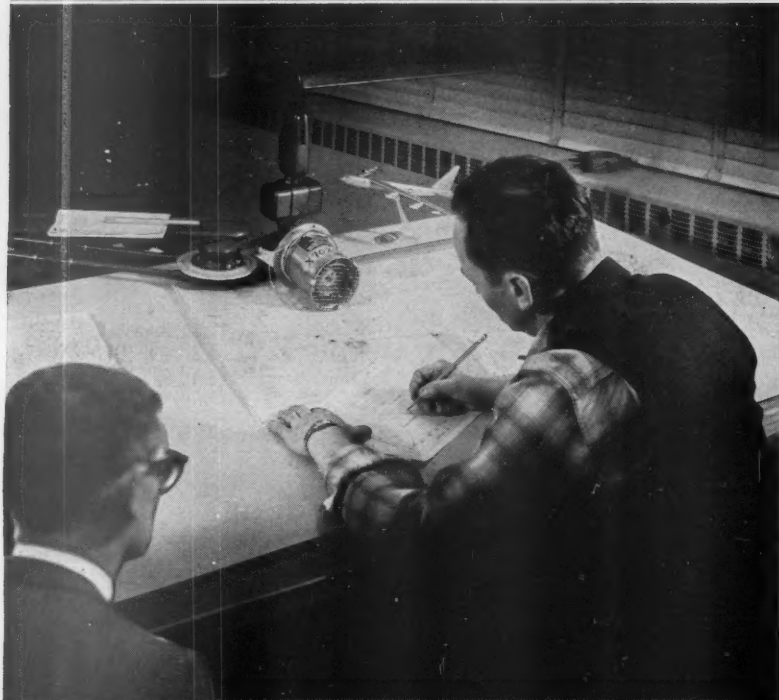
against reckless U.S. disarmament after the war. McCloy also enjoys the esteem of statesmen and diplomats for his role in restoring Germany as a strong and democratic ally while he was the first civilian U.S. High Commissioner in Bonn from 1949 to 1952.

• **Tight Schedule**—Right now, McCloy is as busy as a bumblebee moving among the various people concerned with arms control, gathering and disseminating ideas, trying to reconcile clashing views and interests.

For McCloy, his most urgent immediate problem has been to hammer out a new U.S. position on the nuclear test ban. Arthur H. Dean, who negotiated the Korean truce, will present that position to the Soviets when test ban negotiations get under way again in Geneva next week.

At the same time, McCloy has been wrestling with the longer-term problems of arms-control policy and bureau-

Now I See What They Mean When They Say,



"HIGH OUTPUT PER POUND OF JOY FAN RESULTS IN VITAL WEIGHT SAVINGS"

On missiles, aircraft, and atomic subs where every pound and cubic inch of equipment saved counts heavily, Joy custom-designed fans set the standards. Fans weighing a pound or less produce 50 CFM of air at pressures as high as 2" WG. Compact and efficient Joy fans are aboard the *Nautilus* and sister atomic subs, meeting the rigid standards of atomic service. Other Joy fans perform a variety of functions on Douglas, Boeing, Lockheed and Convair jet aircraft. Still other fans are used in missile programs such as the Nike, Bomarc and Hawk.

Efficiency and compactness are achieved by use of the basic vane-axial design for Joy custom-built fans. Although hundreds of standard models are available, custom designs can be supplied to your specifications. All Joy fans have in common the high output per pound of weight which has made them popular with designers working to MIL SPECS.

In addition to the custom-designed fans, Joy makes a complete line of adjustable-pitch fans for commercial and industrial cooling and ventilating. Whatever your air moving problem may be, Joy can provide you with the best solution.

For full details on Joy custom fans, write for Bulletin 1143-56

AIR MOVING EQUIPMENT FOR ALL INDUSTRY



Reciprocating Compressors



Single Stage Centrifugal



Multi-Stage Centrifugal



Axial Compressors



Fans and Blowers

JOY

Joy Manufacturing Company
Oliver Building, Pittsburgh 22, Pa.
In Canada: Joy Manufacturing Company
(Canada) Limited, Galt, Ontario

cratic organization of the disarmament effort.

A recent day's schedule gives some idea of how McCloy operates:

9:15—Conferred in his State Dept. office with Robert Mattison, chief of the policy planning section of the U. S. Disarmament Administration, about the proposed nuclear test ban.

10:30—Received British test ban expert David Ormsby-Gore and British Ambassador Sir Harold Caccia in his office. Discussed the coming three-power test ban negotiations.

1:00—Lunched in his office alone, jotting down ideas as he ate.

2:30—Saw Pres. Kennedy alone at the White House to give him a report on preparations for the test ban talks.

2:45—Arthur H. Dean joined the President and McCloy for detailed strategy planning of the negotiations.

3:45—Called a conference in his office with his deputy Adrian S. Fisher and senior officials of the Disarmament Administration.

5:00—Worked alone until an unrecorded hour.

• **Keeping in Touch**—This schedule gives only an approximate idea of the complexity of McCloy's activities. He has been following closely the work of the panel of experts headed by Dr. J. B. Fisk, president of Bell Telephone Laboratories, Inc., which is reviewing technical aspects of the proposed test ban.

He also has made it a point to talk with the veterans of past disarmament negotiations with the Soviets and by now has conferred with almost all of them. He has consulted at one time or another many of the growing number of scholars and intellectuals who have specialized in arms control studies.

McCloy naturally is keeping in close touch with Dean Rusk, since disarmament policy is so intimately related to foreign policy. He sits in on Rusk's meetings with senior State Dept. officials and sees Rusk privately several times a week. His contacts with McNamara and Nitze are scarcely less close.

Backstop Teams

While McCloy is only one of many important officials concerned with evolving new disarmament policies and procedures, he is the only one whose sole responsibility is disarmament and who is responsible for all aspects of it.

The foreign policy implications of disarmament, for example, is only one of Rusk's preoccupations, and he makes no pretense of understanding all the defense and nuclear research implications involved. McNamara and Nitze for their part are concerned with the meaning of arms control proposals for defense policy or weapons systems. Nitze considers the disarmament aspect

OFF-HOUR EATING:

Once it posed a problem; now it pays in savings

For farseeing executives with in-plant employee feeding problems, here's an important fact: *Canteen automatic hot-food service works around the clock.*

Canteen vendors supply hot food, hot and cold drinks, salads, sandwiches, pastries . . . even cigarettes and candy . . . any hour of the day or night, at the drop of a coin.

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of his job as an attempt to relate strategy and weapons systems to arms control policy in an over-all national security policy.

At the White House, Bundy and Wiesner are intimately concerned from different points of view with disarmament efforts.

• **Experts on Tap**—In tackling his job, McCloy is drawing heavily upon the experience and expertise of the U.S. Disarmament Administration. The USDA was set up within the State Dept. by Eisenhower last September, and Congress appropriated \$400,000 for stepped-up disarmament research.

Hard core of the Disarmament Administration is a score or so of State Dept. officials who formerly served under the Special Assistant to the Secretary of State for Disarmament & Atomic Energy.

Since September, the size of the staff has increased to 55 and is expected to grow quickly to 95 or 100. The two key men in the new setup are: Acting Deputy Director Edmund Gullion, a young foreign service officer. He gained his experience during three years on the staff of Harold Stassen, when he was special assistant on disarmament to Eisenhower.

In charge of policy planning for the USDA is Robert Mattison. He was Stassen's staff director.

• **Liaison Men**—The Disarmament Administration has a number of military men, men from AEC and from the U.S. Information Agency seeded throughout its staff and plans to have more. In addition, USDA plans to recruit top-flight scientists in the near future.

• **Permanent Organization**—Although McCloy has not made up his mind yet about how the continuing job of disarmament policymaking and research should be handled organizationally, there is every indication that he will recommend building a permanent disarmament organization—either under State, the White House, or with independent status—upon the foundation of the present Disarmament Administration.

• **Stassen's Try**—The present intensive reassessment of disarmament policy, of course, is not the first thing of its kind since World War II.

Beginning in 1955, Harold Stassen, then Eisenhower's disarmament adviser, undertook a major review of all aspects of arms control and disarmament policy. For a time, in the spring of 1957, there was renewed hope that the Soviets might go along with some first-step arms control agreements. This hope ended in August, however, when Soviet delegate Valerian A. Zorin rejected all Western proposals.

• **Stassen's Handicap**—There are many significant differences, however, between Stassen's attempt and McCloy's

efforts today. Arms control research was in its infancy in the mid-Fifties, and the work of Stassen's task forces was quite superficial compared to the research now being charted.

More important, Stassen was operating in an unpropitious political climate. He himself was a controversial political figure, the disinterestedness of whose views often was questioned. Eisenhower was sincerely convinced of the urgency of curbing the arms race, but he was inclined to leave ways and means to John Foster Dulles, who was deeply skeptical of the possibility of reaching any safe and meaningful agreements with the Soviets.

Beyond that, Defense Secy. Charles Wilson never took arms control seriously, AEC Chmn. Lewis Strauss strongly opposed any restraints on AEC's freedom to develop weapons.

• **New Note**—This situation contrasts sharply with the one today in which the President personally is intensely interested in not only the principles but the details of arms controls. All of the men involved in shaping arms control policy believe with the President that controlling the arms race is increasingly urgent, if not essential, to national security.

Balance of Terror

When it comes to the substance of disarmament policy, the thinking of McCloy and the others involved in reassessing it is tentative at this point. It will be some months before a clear pattern begins to emerge, but not longer than that, since Kennedy hopes it will be possible to begin general disarmament negotiations next summer.

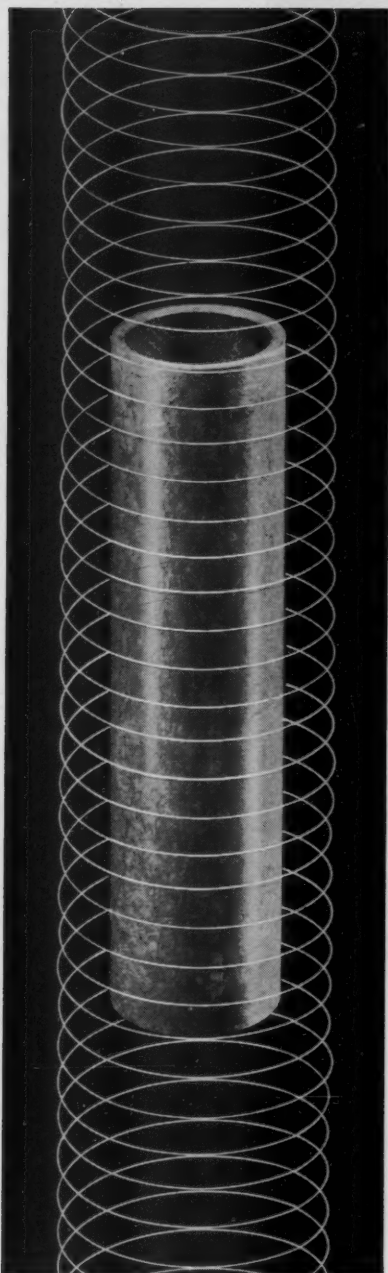
McCloy's own starting point is that it is not disarmament but peace that the U.S. seeks in the world. Wars have resulted from too few arms as well as from too many, and above all from a real or fancied imbalance in the military strength of rival nations.

Total disarmament, as proposed by Soviet Premier Nikita Khrushchev, not only is a distant goal, but might actually increase the danger of war as long as the power struggle continues unabated. The nation that succeeded in hiding a few nuclear weapons could terrorize the world.

Thus McCloy feels his first task is to find ways to make the balance of terror more stable. Beyond that lies the search for agreements to reduce gradually the size and cost of defense establishments without upsetting the balance of power, and to put new areas of military rivalry such as outer space off limits. In the distant future is the vision of radical disarmament within a framework of world law.

• **Priority Problem**—When it comes to the first priority of “stabilizing mutual

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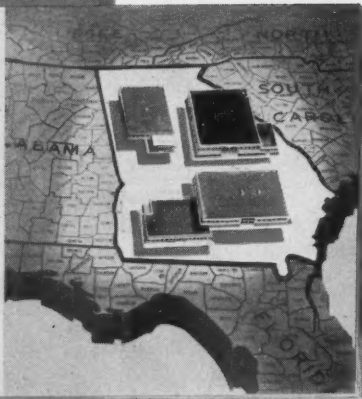
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deterrence," in the jargon of the arms control experts, McCloy is studying a wide range of possibilities.

Many of the ideas don't involve negotiation at all—simply changes in our own defense policy. For instance:

To lessen the enemy's temptation or his need to strike first with nuclear weapons you "harden" your delivery systems quickly by putting them underground, making them more mobile.

To reduce the chance that the Soviets may miscalculate U.S. willingness to retaliate against Soviet encroachments on Western positions around the world, you improve your ability to fight limited wars or resist limited attacks without having to resort immediately to the use of nuclear weapons. Your military posture and plans thus become a more "credible deterrent" against provocative acts short of all-out war. As one arms control expert puts it: "You design your military strategy and weapons systems to introduce as many stages as possible between surrender and Armageddon."

• **Which Weapons**—Beyond these fairly obvious moves, a lot of consideration is being given in Washington to whether certain types of weapons are more "deterrent" and hence have a greater stabilizing effect than others.

For example, some arms control experts argue that the Polaris, because it is hard to hit and also because it is relatively small, is a better "deterrent" weapon than large and possibly more vulnerable missiles like Atlas and Titan. Being smaller, it can retaliate against soft targets such as cities, but is perhaps less of a threat to Soviet launching pads and hence less of a spur to the Soviets to strike first while they can.

• **Slower Reaction**—Measures such as those mentioned are all designed to permit slower and more judicious reactions in a crisis and to give the U.S. a wider range of possible military responses to diverse provocations—to permit the punishment to suit the crime.

Such measures can and to some extent will be taken unilaterally. Kennedy is continuing to push Polaris, Minuteman, and the hardening of fixed missile launching sites. He also plans to build up U.S. conventional military capacity (BW-Mar.11'61,p26).

Arms control officials argue, however, that there is also a useful area for negotiation here. They believe that the balance of terror can be made more stable if, for example, both sides harden their own delivery systems to make them less "nervous"—give them a slower reaction time and a safer "second-strike" capability.

Beyond that, there is some concern lest the Soviet leaders misinterpret moves made by the U.S. to safeguard and diversify its deterrents as aggressive preparations for war. Thus, thought



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nudge him on to buy. Ideally, the marked or stamped message ought to do this as long as the product lasts (the lobsterman still hasn't licked this one; he repaints every spring).

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is being given to trying to convince the Soviets that the basic strategy of stable mutual deterrence is in their interest as well as ours, not a threat to them.

When it comes to minimizing the risks of accidental war, a whole range of proposals are being advanced—some of them quite fanciful and most of them involving some degree of agreement or cooperation with the Soviets.

It is suggested that we seek agreements for communicating information on defense preparations and activities to reassure each other that they are not aimed at preventive war. Joint radar, outer space, or other detection systems might be set up to guard against surprise attack. Even such medieval devices as exchanging spies and hostages aren't ruled out of hand.

• **Safety Zones**—In another area, it is being proposed that we offer to instruct the Soviets in our "fail safe" procedures, that as we improve command control over isolated military commanders we explain to the Soviets what we are doing and encourage them to do the same.

If we should at some stage embark upon a more ambitious program of civil defense—which, once complete, might stabilize the deterrent but at the beginning could be interpreted as preparation for war and a reason to strike first—we might encourage the Soviets to follow suit. Creation of zones of inspection and of partial disarmament in troubled areas also are being urged as a means of lessening the danger of war by accident.

• **Other Precautions**—Also interesting are the various suggestions for reassuring both ourselves and the Soviets if either side seemed to be on the brink of war. For example, teams of inspectors might be stationed in the two countries ready to go into action fast if needed to reassure one or both sides that the other was not about to blast off. Or a "hot phone" or direct telephone communication might be established between Khrushchev's residence and the White House.

• **Selling Job**—Beyond arms control and stabilizing mutual deterrence, McCloy is looking for ways actually to begin to reduce the size and dominance of military establishments on both sides of the Iron Curtain. Thinking is even vaguer at this point and the ideas being created so far appear to be mostly familiar ones such as seeking cessation of military nuclear production, inspection and control of outer space launchings, reduction of nuclear stockpiles through contributions to international depots, etc.

What is new is greater attention to ways of making inspection and control of such measures less cumbersome and politically distasteful to the Soviets. In this area, there is evidence that some imaginative new thinking is being done.

ARMS CONTROL



NATIONAL SECURITY: Most people take this word for granted, but it needs definition. The concept of national security includes at least the following components: (1) ability to survive a war; (2) ability to prevent a war that would destroy the nation; (3) ability to withstand enemy pressures, threats, or attacks on allies; (4) ability to preserve national sovereignty and to obtain foreign policy objectives.

To achieve national security today, a nation may employ some combination of three interrelated elements: arms, arms control, and . . .

DETERRENCE: Preventing hostile action by the threat of forcible retaliation. Here again, the idea is less simple than it sounds. First, what kinds of hostile action are you trying to deter? A common classification: (1) direct nuclear attack; (2) extreme nuclear provocation (atom-bombing an ally); (3) extreme non-nuclear provocation (a Soviet troop invasion of Western Europe); (4) moderate provocation (the shelling of Quemoy).

Second, what kind of forcible retaliation do you threaten to use? You can rely on . . .

NUCLEAR WEAPONS: Any devices using the explosive power of the fission of uranium or plutonium (atom bombs) or the fusion of hydrogen (H or thermonuclear bombs). These are available in a range of sizes roughly measured by comparison with tons of TNT. Small weapons for battlefield use, called "tactical," are equivalent to perhaps 5,000 tons (5 kilotons) of TNT (World War II blockbusters had about 5 tons; Hiroshima was destroyed by a 20-kiloton bomb). Big bombs measure 5-million to 10-million tons of TNT—the "megaton" range. But there is no theoretical limit to the size.

CONVENTIONAL WEAPONS: Include all types of weapons used in World War II. Sometimes tactical nuclear weapons are included among conventional weapons. Chemical and biological weapons (C/B) sometimes are, sometimes are not.

Discussions of deterrence also distinguish various ways to use, or threaten to use, nuclear weapons. There is the question of when to use them—whether as a . . .

FIRST STRIKE: This is the first nuclear attack of the war, whoever delivers it. It is the blow you can deliver before

2. The New La

you have suffered any damage to your nuclear forces.

SECOND STRIKE: This is a blow delivered after you have received an enemy nuclear attack. You are limited to the weapons that have survived enemy attack—survived because they are in "hardened bases" that can withstand an enemy explosion or because they are widely scattered or movable (as in submarines or railway cars).

There is also the question of what targets you aim at. You can use a . . .

COUNTERFORCE ATTACK: This is a blow aimed at the enemy's weapons systems. It is intended to prevent him from using his weapons against you. It is expensive, because his weapons are likely to be well protected or hidden. You will have to use many bombs and bombs of multi-megaton power.

COUNTERVALUE ATTACK: This is an attack against the enemy's cities and other valuable and vulnerable targets. It is intended to punish him, or the threat of it is intended to deter him. It is relatively cheap, because a few bombs can do enormous damage to populations and cities, although not necessarily to the enemy's scattered and mobile weapons systems. Countervalue attack is sometimes called "counter-economy," sometimes called "finite deterrence."

With different combinations of nuclear and other weapons and ways of using them, you can evolve many different strategies of deterrence . . .

DEFENSIVE-RETALIATORY STRATEGY: You assume that you yourself will not deliver a first strike. You seek to deter an enemy from striking first by the threat of your second strike. The second strike you prepare to deliver might be either countervalue or counterforce.

OFFENSIVE-PREEMPTIVE STRATEGY: You deter attack by threatening to deliver a first strike if the enemy launches a conventional attack on you or if he appears about to launch a nuclear attack. Yours would be a counterforce attack in order to limit the effectiveness of his retaliatory second strike.

STABLE MUTUAL DETERRENCE: You consider that your opponent's power is already so great, and likely to get so much greater that, whether you strike first or second, you still can't keep your enemy from hurting your nation more than you are willing to endure. Your own power is also so great, or soon will be, that your enemy is in the same

Language of Arms Control

position. Both sides are therefore interested in stabilizing the deterrent situation. This may involve avoiding a continuation of "the arms race," which might upset "the balance of terror."

There's hot controversy over whether we and the Soviets presently have such a balance of terror. Those who doubt it say there is a . . .

MISSILE GAP: A Soviet lead—which, it is said will be 3-to-1 by 1963—over the U.S. in numbers of intercontinental ballistic missiles (ICBMs).

Those who think the true balance has not shifted against the U.S. say that, whether or not there is a missile gap, the U.S. is not at the short end of any . . .

DESTRUCTION GAP: The total superiority of one nation over the other in nuclear striking power—including not only intercontinental missiles but also intermediate-range ballistic missiles (IRBMs), manned bombers, nuclear submarines, aircraft carriers, fighter-bombers on forward bases, etc.

But if there's a balance, you want it to be stable rather than precarious; and stability will depend partly upon the number of weapons you have for deterrence. Thus . . .

VERY HIGH LEVELS of armament may be destabilizing, because they are more likely to be accident-prone.

VERY LOW LEVELS of armament, some analysts hold, may also be destabilizing because a small amount of enemy cheating would give one nation the jump on an unwary and underarmed opponent.

Stability will also be related to the types of deterrent weapons you employ . . .

PROVOCATIVE weapons are those that endanger you by frightening your enemy into the belief you are going to attack, and so goad him to attack. Counterforce weapons are often considered provocative (but not by counterforce advocates). Civil defense is regarded by some as provocative because it implies that you are preparing to endure retaliation.

PATIENT or NERVOUS weapons: A weapon that must be launched quickly and irrevocably (such as a missile on its pad) upon receiving warning of attack is nervous. One that can wait to be sure or that can be recalled (an airborne bomber, for example) is patient. There's debate whether proposed orbital weapons, circling the earth ready

for use, would be nervous or patient; most agree they would be provocative.

CREDIBLE AND COMMUNICABLE deterrents are ones the enemy knows you have and believes you would use if excessively provoked or attacked. Deterrence may thus be a useful way of preventing deliberate, planned surprise attacks.

But deterrence may not be able to stop all kinds of wars—such as . . .

ACCIDENTAL WARS: Wars triggered by false alarms (such as a shower of meteorites), unauthorized or irrational human behavior (a crazy pilot or general), defective equipment (a falling switch) . . . or . . .

ESCALATION: The process by which wars start small and limited, but grow bigger and bigger.

CATALYTIC WAR: A vengeful or ambitious or desperate smaller power might provoke war between two great powers, so that they will wipe each other out (the catalysis might take the form of nuclear bombs smuggled into the great power's harbor and exploded).

Most experts agree that the danger of wars by accident, miscalculation, escalation, or catalysis will grow as nuclear weapons spread to many nations. This is the . . .

Nth-COUNTRY PROBLEM: Country 1 (U.S.), 2 (U.S.S.R.), 3 (U.K.), 4 (France). . . N (almost any country with some industrial skill).

Therefore, to add stability to your system, you will need not only deterrence but . . .

ARMS CONTROL: Cooperation with potential enemies to establish kinds and quantities of weapons intended to make wars less likely. The cooperation can also involve control over the development, deployment, and use of weapons—whether in periods of peace, tension, or actual hot war.

The cooperation may be by . . .

TACIT or FORMAL AGREEMENT: As opposed to a formal treaty, a tacit agreement is an unspoken understanding in which both sides take voluntary measures in the expectation that the other side will do the same. The present moratorium on nuclear testing is an example.

Arms control planning lays great stress on . . .

INSPECTION: Checking up on your enemy to make sure he is not planning

something dirty—and submitting, correspondingly, to his inspection. Among ways of doing this are . . .

TECHNICAL INSPECTION: This involves the use of elaborate apparatus—on the ground, under the sea, in the air, or in outer space—for reconnaissance and surveillance of illegal activities—for seeing or sensing sound, light, heat, radio waves, radioactivity, etc.

CONVENTIONAL INSPECTION: Teams of inspectors who patrol factories, harbors, airports, missile bases, laboratories, atomic energy plants, stockpiles.

ESPIONAGE-TYPE INSPECTION: This involves use of human agents, legally or semi-legally, to keep an eye on what the other country is up to.

RECORDS INSPECTION: Detailed examination and analysis of pieces of paper—such as budget and expenditure data, production and inventory records. Normal national intelligence activity today involves a great deal of this.

Since inspection may not be perfect, and an accidental bomb or a catalytic bomb without a return address on it may arrive, arms control requires . . .

COMMUNICATION between the parties to the arms control agreement, to verify whether or not the agreement has been broken.

To add extra stability, some arms controllers would use . . .

HOSTAGES: This form of security was practiced by mistrustful despots in earlier times. Some consider that mutual deterrence makes each nation the hostage of the other. There are many trick versions of the hostage idea.

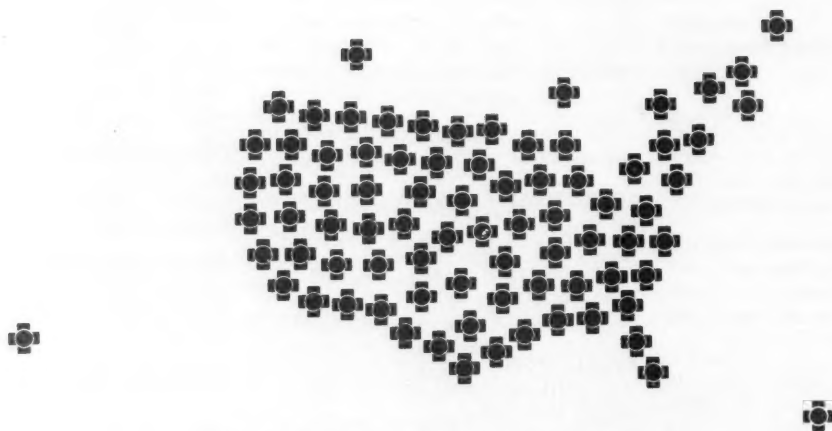
Some favor less reliance on hostages, physical deterrence, and inspection systems, more on political means including . . .

INTERNATIONAL LAW—which today exists only in a rather rudimentary form.

DIPLOMACY, CULTURAL EXCHANGES, and other social techniques aimed at increasing understanding, reducing hostility.

Many believe the ultimate aim of arms control is . . .

DISARMAMENT: The particular form of arms control that aims specifically at reduction or elimination of weapons. However, the word is still avoided in some circles in favor of discussion of what handling of armament contributes most to a stable international situation.



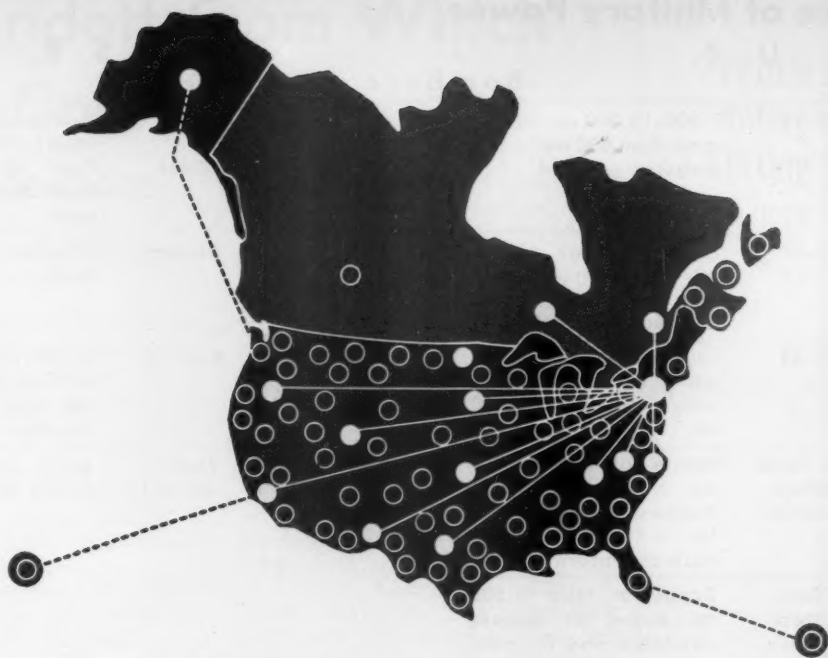
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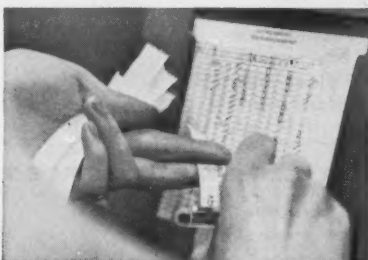
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10:59 A.M. Wire reply comes back to “Braincenter” from local Blue Cross plan on perforated tape, and is then immediately relayed to the originating hospital.

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The Balance of Military Power

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Bombers

580	B-52	7,000-10,000 mi. range; more than 600 mph.; 20-megaton payload	60-70 100-120	Bear Bison	Turboprop; range more than 6,000 mi.; 560 mph. Pure jet; range more than 6,000 mi.; 560 mph.
1,000	B-47	Medium range (3,000 mi. or more); 600-plus mph.; gradually being shelved as obsolescent	1,000	Badger	Medium range; 600 mph.
25-30	B-58	Supersonic speed, 1,300 mph. in short bursts; range more than 3,000 mi.	?	Bounder	Supersonic speed; medium range; reportedly can operate from grass runways
700-plus	Air Force fighter-bombers	Range at least 1,500 mi.; based near Soviet borders; available also for conventional, non-nuclear warfare	4,000	Tactical aircraft	Some are supersonic; all are land-based
600-plus	Navy attack planes	Range at least 1,500 mi.; based on carriers; available also for non-nuclear warfare			

Intercontinental Missiles

(5,000-8,000 mi. range)

12	Atlas	Ballistic; 2- to 7-megaton warhead	50-200	—	Expert opinion varies widely as to how many; 5- to 10-megaton warhead
20	Snark	Cruise-type; subsonic speed; all based at Presque Isle, Me.			

Intermediate Missiles

(About 1,500 mi. range)

60	Thor	Manned jointly with RAF in Great Britain; warhead 1 megaton	500-700	—	May have larger payload than U. S. IRBMs; are zeroed-in on U. S. overseas bomber and missile bases
15	Jupiter	In Italy; another base being built there and one in Turkey; 1-megaton warhead			
32	Polaris	Aboard two submarines now, with four more subs to join fleet this year; 1-megaton warhead			

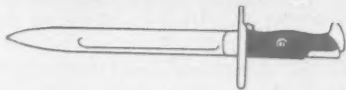
Conventional Forces

14	Army divisions	Including two airborne; plus 24 major combat units; 40% overseas	135	Army divisions	Half are armored or mechanized; nine are airborne
3	Marine divisions	Plus supporting tactical aircraft			
817	Navy combat ships	Including more than 100 submarines, all ocean-going and some nuclear-powered	At least 685	Navy combat ships	Navy is second only to U.S. in size; includes 430 submarines, but only about half are ocean-going

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3. Standoff From Which Arms Control Starts

ARMS CONTROL



As Washington explores the possibility of discussing arms control with Moscow, the official view is that, in over-all armed strength, the two nations are at a standoff. They have reached a balance of power. In the classic military definition, this means neither nation possesses—or even believes it possesses—enough armed strength to impose its will on the other through the threat or use of force.

In modern terms, a nuclear stalemate exists because neither side can be confident that its initial onslaught would wipe out the other's ability to retaliate effectively. At least for the time being, the U.S. and Russia are in a state of mutual deterrence.

As the chart shows, each has the strategic weapons—the bombers and the long-range missiles—to destroy the other's cities, industrial facilities, and similar resources. At the moment, the Russians are overwhelmingly superior in conventional, or non-nuclear, forces; their armies are larger and better equipped. But in strategic nuclear power, the U.S. has a slight edge.

Strategic Forces

The U.S. strategic advantage, however, is precarious, because it depends on the manned bomber, a weapon that's on the way out as the dominant strategic force. Bomber for bomber, the U.S. has a significant "counterforce" advantage. If bombers alone were concerned, the U.S. could theoretically cripple or wipe out Russia's retaliatory power with a first strike.

But military technology is advancing rapidly. The long-range bomber, which can be defended against, is in the process of being supplanted by the intercontinental missile, whose 18,000-mph. speed and high trajectory so far defy defense. The missile, moreover, is harder to incorporate in an arms control program than the bomber—and future weapons will doubtless be harder to control than missiles.

• **Getting Through**—U.S. bombers can carry more nuclear bang than twice their number of today's ICBMs, but their approach would surely be detected. Russia has been building up an extensive early warning radar sys-

tem. With this kind of warning, U.S. bombers would be exposed to attack all the way to their targets.

Key target areas in Russia are heavily defended with radar-directed anti-aircraft rockets that reach up to about 60,000 ft. (close to the ceiling of U.S. bombers) and with a force of about 10,000 jet fighter-interceptor planes.

How many of our bombers could get through to targets? Bomber strategists claim a 75% to 90% probability, but air defense specialists will tell you a 50% probability is much more likely.

• **Missile Gap**—In the transition from bombers to missiles, Russia got off to a faster start than the U.S. The Russians already have more combat-ready ICBMs than we do. They are expected to maintain a numerical advantage for at least three more years. This constitutes the much-debated "missile gap."

Estimates of Russia's current force of ICBMs range from 50 to 200, with no authoritative consensus in favor of one figure or another, or any figure in between. This force is augmented by intermediate-range missiles—some sources think Russia has 500 to 700, others put the figures much lower. These would be useful only against U.S. overseas bases and U.S. allies.

By the end of next year, Russia is expected to have doubled its number of ICBMs. In 1963, Russia may have as many as 600 ICBMs, compared with about 200 fixed-base U.S. missiles at that time. This is the much-publicized three-to-one lag that the missile-gap critics cite. These critics fail to include the Navy's Polaris IRBM in their comparisons (more than 200 of these missiles will be at sea by 1963).

Destruction Gap

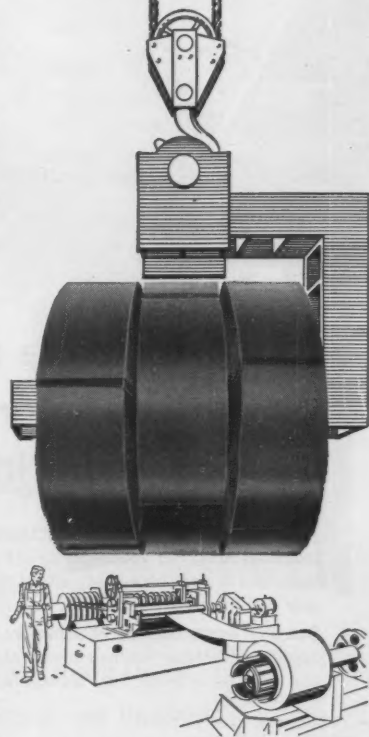
To some defense experts, the missile gap poses the gravest military threat ever faced by the U.S. The fear is that the Russians will shortly have enough ICBMs to, in theory, destroy the bulk of U.S. retaliatory forces—bombers at fixed bases and missiles at vulnerable launching sites.

Not all defense experts see the missile gap in such grim terms. The general view in the Pentagon and in Congress is that the Soviet lead in missiles is not now, and is not likely to become, synonymous with a "destruction gap."

The concept of a "destruction gap" takes into account not raw numbers but the dispersal and diversity of the

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weapons systems that make up U.S. nuclear striking power. This means the long-range jet bombers that fly out of some 70 bases in the U.S. and overseas, the smaller bombers on carriers prowling the oceans, the Polaris missiles on nuclear submarines at sea, the fighter-bombers poised close to Soviet frontiers, the IRBM bases in Great Britain, Italy, and soon in Turkey, and the infant ICBM force that's being built up in the continental U.S.

In the short-term view, it is inconceivable to most people that Russia could effectively knock out the bulk of these targets almost simultaneously—as it would have to do in order to prevent a devastating retaliatory blow.

• **Long-Range Policy**—In the longer run, the U.S. must assume Russian ICBMs will become more numerous, more reliable, and more accurate. The U.S. must keep pace by multiplying its hardened or mobile missile systems and by expanding and improving its airborne bomber alert. Only thus can the U.S. continue to restrain Russian confidence in first-strike success.

In essence, this is what the Kennedy Administration has concluded in its intensive reappraisal of U.S. defense policy (BW—Feb. 11 '61, p98). In its estimate, the Administration is hedging on the side of caution. It is accelerating efforts to make our nuclear striking power less vulnerable, to assure the nation a second-strike nuclear capability—the capacity to absorb an attack and lash back with a crushing counterblow. All to make deterrence more "stable."

Manned Bombers

As of now (chart, page 68), the manned bomber is still the backbone of nuclear striking power on both sides of the Iron Curtain. Just a few weeks ago, the Army's intelligence chief told Congress that long-range planes rather than missiles are "the principal Soviet instrument for intercontinental attack." This despite Russia's presumed edge in missiles.

Most of our Strategic Air Command fleet of 580 B-52 bombers have a range of 7,000 mi. or more; another 50 to be added within a year are designed for 10,000-mi. range, without refueling. These bombers are armed with 500-mi. air-to-ground Hound Dog missiles against anti-aircraft defenses and 200-mi. Quail diversionary missiles to foul up enemy radar. In about three years, they will receive 1,000-mi. range air-to-ground Skybolt missiles that carry a payload potent enough to hit primary targets or defense batteries.

They also carry a 20-megaton thermonuclear payload.

Unless present schedules are changed, the Air Force hopes by 1965 or so to start replacing its B-52s with B-70

bombers, with a cruising speed of 2,000 mph.—more than three times that of the B-52. The supersonic B-58 medium bomber, with twice the speed of the B-47 it is beginning to replace, is already coming into operation. In 18 months, more than 60 will be in service.

• **Airborne Alert**—At any given time, nearly one-third of the B-52 long-range bombers are ready to take off on 15 minutes' warning. Obviously, it would be still safer not to have to count on 15 minutes' warning—planes caught on the ground in a first strike, or that seem likely to be caught on the ground, cease to exist as a threat of retaliation.

Hence, the Air Force is rushing plans to maintain a continuous airborne alert, to keep as many as one-quarter of the planes flying at any given time, with others continuing on 15-minute alert status. This would seem to assure survival of a substantial counterforce, but it is a strain on manpower and on the purse. The Air Force may have to settle for less.

The Score on Missiles

SAC's missile force (BW—Oct. 1 '60, p106) is scheduled to grow far beyond its present token stage (chart, page 68). Current plans call for about 250 liquid-fueled Atlas and Titan missiles and at least 300 solid-fueled Minuteman missiles at fixed bases by 1965, plus another 150 Minuteman missiles deployed on railroad cars cruising about the country. In addition to the 60 Thor IRBMs based in Great Britain, 45 Jupiter IRBMs will be combat-ready at bases in Italy and Turkey by the end of next year.

• **Hardened Pads**—The earlier Atlas squadrons are being set up on launch pads at ground level, unprotected against attack. Later Atlas and Titan squadrons will be installed underground at the so-called hardened sites, in which layers of concrete are designed to withstand pressures of 100 lb. per sq. in. from nuclear bursts. Fixed sites for the Minuteman reportedly will be designed for overpressures up to 300 psi.

Even this hardening would, of course, be worthless in the case of a direct hit or even a near miss. A 1-megaton blast on a dry soil surface, for instance, would dig a crater hundreds of feet deep and a quarter-mile across, and the pressure at the rim of the crater would build up to 1,000 psi. The Russian ICBMs pack several times a 1-megaton wallop.

Thus, given the accuracy that most experts attribute to Russian ICBMs, missiles on our fixed sites are sitting ducks, despite the hardening and the dispersal. The Pentagon hasn't even attempted the impossible task of keeping the sites secret, and Soviet ICBMs

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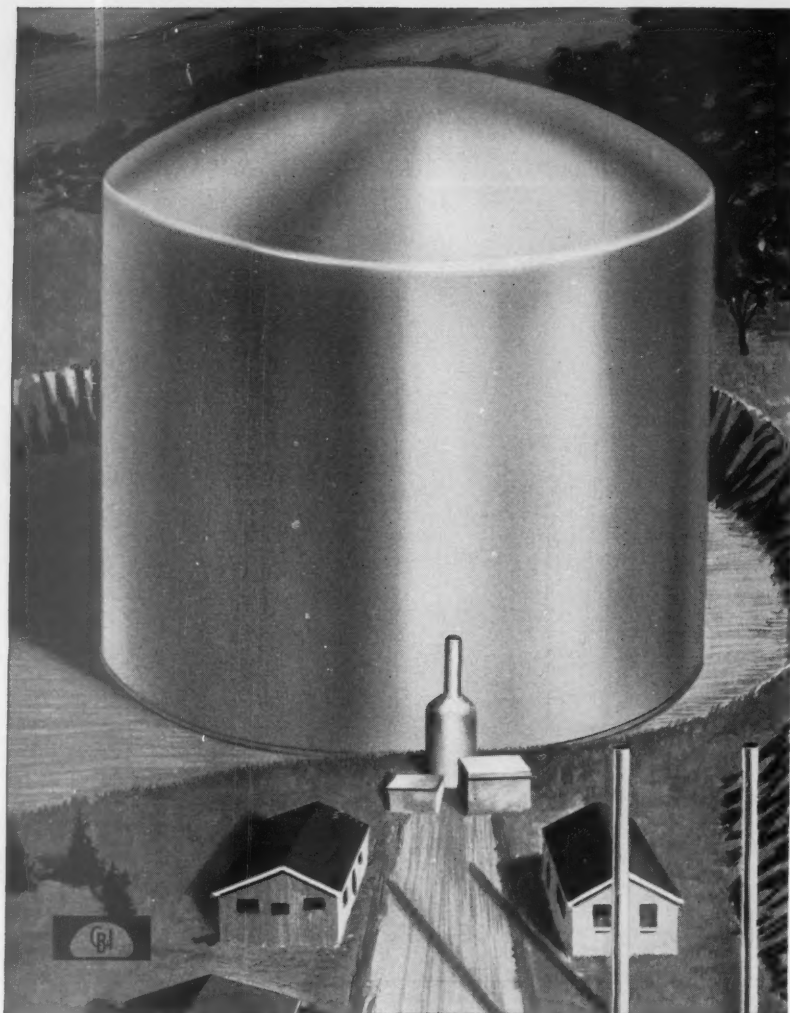
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are no doubt already aimed at known U.S. missile bases.

This vulnerability is why there is growing preference for missiles such as Polaris and Minuteman, which rely on mobility for protection rather than on hardening.

• **Mobility**—To preserve a missile force against loss in a first strike by the enemy, the best remedy seems to be to keep it moving, the same as in the case of a bomber force. With missiles, this can be done two ways: by putting them aboard ships at sea and by basing them on moving railroad cars.

Both methods are to be used. Besides the six Polaris-armed nuclear submarines that will be at sea by yearend, 13 others are under construction, and the schedule calls for 45 to be built by 1968, if not sooner. Meanwhile, the Air Force plans to have 150 Minuteman missiles combat-ready on railway cars three years from now.

Neither Polaris nor Minuteman is in the destructive class of the Atlas or Titan—each carries at most a 1-megaton payload. But a 1-megaton warhead that can be relied on as relatively invulnerable to surprise attack is not a weapon to be scorned.

• **Accuracy**—No numerical comparison of ICBM capability means much without an idea of the missiles' reliability and accuracy. U.S. intelligence on Russian ICBM performance is scanty, but the experts doubt that their missiles outclass ours. For our Atlas, the probability is that half the missiles launched can be expected to land within 2 mi. of a target point.

This points up the high number of missiles that would be required to make sure every target was blotted out if a surprise attack was to succeed. Jerome B. Wiesner, the President's special assistant for science affairs, sets up this example:

Suppose a deterrent force, all at fixed bases, consists of 200 missiles that are protected for 300-psi. overpressure. To knock out this force, an attacker would need 1,000 missiles, with a median accuracy of 1 mi. Even then, the attacker could count on no better than a 90% probability of reducing the deterrent force to only 10 missiles.

A further difficulty for anyone planning a first-strike attack: When you think of detonating thousands of megatons of explosives, you have to begin to worry about poisoning the earth's entire atmosphere—your atmosphere as well as the foe's.

As strategic missiles get more invulnerable, it will become ever more perilous for a nation to initiate an all-out nuclear war. Even the threat to start one will lose its force when it becomes apparent that a first strike could so little diminish the retaliatory force that it would amount to national suicide.



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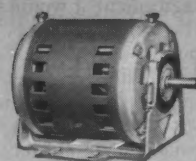
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4. How to Check on Arms Control

ARMS CONTROL

Just as the armed forces of major powers have come to depend on a mix of weapons, so any broad arms control agreement would probably have to consist of an interlocking net of checks and double checks.

There are at least two good reasons for this:

- No technical device—now or in the foreseeable future—can be considered versatile enough to handle the arms control inspection by itself.

- No single system would, in the opinion of any government, be considered safe enough to catch the bulk of all possible treaty violations.

From a strictly technological standpoint, therefore, what are the possibilities? What kinds of arms control agreements can science, as it exists today, police most firmly? What kind of hardware would be involved? Could it be kept simple enough to be efficient? And how much would it cost to develop a workable arms control system?

- **Not Impossible**—In the opinion of most scientists, the technical problems involved in setting up an arms control inspection system look formidable but not impossible. Some sort of system could probably be set up that would be able to keep track of the state of major armament around the world; it would cost, initially, some \$4-billion or \$5-billion. It wouldn't be 100% foolproof, and it wouldn't guard against all contingencies. But it would be reasonably effective. And it would serve to curb the most destructive kind of modern warfare—a nuclear holocaust.

The system would continually have to be adjusted to keep pace with technological developments. And it would require, at least in its initial stages, some assumption of good faith on the part of all nations.

Negotiators would have to deal with Russia's stand on the kind of arms control agreement it would find acceptable. At the same time, they would have to propose a system they regard as practical and effective. The lack of a 100% foolproof system may embarrass the negotiators. But it doesn't make the idea of arms control entirely hopeless.

- **Practical Problems**—Not all technical fields that might have a bearing on arms control have progressed equally. Studies in some fields, such as radar and infrared, that happened to coincide with the needs of given weapon systems are technologically much further

advanced than, say, seismology, yet seismology may have to be brought to the same level of sophistication if a global arms control system is to work.

It would be possible within a couple of years to set up a system capable of detecting, anywhere on the surface of the earth, any mass movement of men, materials, or implements of war that are larger than a small tank. Such a system would include several kinds of sensing devices: ground radar, airborne electromagnetic monitors, and infrared and optical sensors borne by satellites.

It would have to be backed up by a corps of trained inspectors with freedom to investigate all signs of unusual activity. It would require a central intelligence clearinghouse for the continuous stream of data from the monitor devices; ideally, this center should be placed in orbit outside the earth's atmosphere.

What U.S. scientists still can't promise to do is to come up with a reliable means of detecting military activity underground. Under the code name Vela, they have been struggling for years to find a way to monitor subterranean nuclear explosions. Despite the progress they have made, they still can't promise a reasonably sure detector even five years from now.

Chances of turning up a reliable detector for underground production of biological weapons are infinitely more remote. A reliable detection network

for underwater activity is technically feasible, however; it becomes chiefly a matter of how much money governments are willing to spend for it.

- **Buying Time**—Some scientists regard it as rather unimportant that it is impossible today to set up a foolproof arms control system. Security, they say, is a relative matter. If nations can agree to set up a reasonably sure system with today's technology—a system that's acceptable to both the U.S. and the Soviet Union—scientists will have time to develop more knowledge of seismology, the atmosphere, aerial reconnaissance, and the like.

Some of the hardware that might be most useful in certain forms of arms control is already close at hand. The U.S. Air Force has two satellite reconnaissance systems within a few years of operational status: Midas, which uses infrared sensors, and Samos, which has an optical system.

Wide use of either or both of these satellites might run into exorbitant costs unless a recoverable rocket booster can be developed. But this development might be speeded up to, say, 1965 if the U.S. and Russia worked together on it under an arms control agreement.

Need for Speed

No discussion of the technical side of arms control is complete without acknowledging the desirability of speedy action. Two factors add to the urgency:

- There's little doubt that Red China is close to successful development of its own atom bomb. The significance of this is certainly not lost on the Russians any more than it is on our own scientists. It dangerously rocks the "balance of terror."

- Both the U.S. and Russia are on the verge of a new and fantastically costly round of arms development. Neither can easily afford, economically, to support bigger and more terrible strategic forces while it is also trying to set up an untouchable "second-strike" capability. Arms control, as the scientists see it, could eventually allow nations to concentrate on defensive, second-strike forces.

- **Not Disarmament**—In the end, too, it would make obsolete a large part of the arsenal in which both Russia and the U.S. are investing billions of dollars. From the standpoint of the scientist, however, it would be simplest to allow major powers, under the arms inspection system, to retain a large part of their current armament, at least for the first few years.

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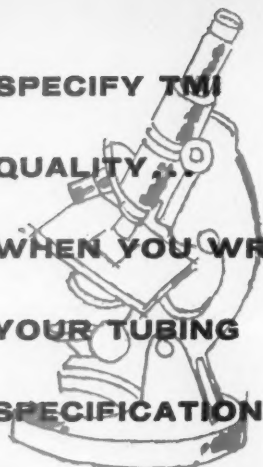
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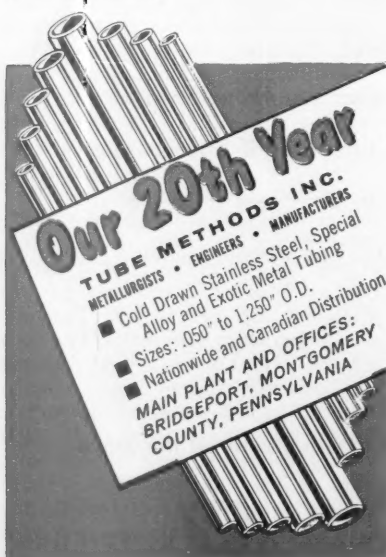


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would, in the scientist's view, allow the arms inspection system to be less precise than might otherwise be needed—the few things that slipped through the net could not radically change the balance of force.

Inspection From Air

Of all the methods of detection and surveillance, the use of planes and satellites is much the most spectacular and glamorous. Yet it is still so new, especially in the case of satellites, that equipment and technique are far from perfected. And it seems relatively easy to figure out ways to mislead them or hide from them.

Following are the major types of airborne sensing devices:

Aerial photography. This field is highly developed. Jet planes at great heights commonly take horizon-to-horizon photos. In pictures taken from speedy jets at almost any altitude, it is possible to distinguish the type and number of aircraft standing on a runway; in photos taken by the U-2 from an altitude of 15 mi., objects as small as a medium-size rocket can be clearly identified.

Radar in planes. Until a few years ago, the image of ground objects received by airborne radar was never very sharp, because planes could carry only a small antenna. Scientists circumvented this limitation by developing a way to make the plane's forward motion augment the effect of the small antenna. Today, aircraft-mounted radar performs to a fine degree of accuracy; it is especially effective in spotting moving objects.

Infrared in planes. Not so highly developed but potentially even more valuable in monitoring is the use of airborne infrared sensors. These react to differences in heat given off by all



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The chief drawbacks of infrared on patrol planes are the bulk of the equipment, its ability to scan only a limited area at a time (though it can be advised where to look by other detection devices, such as radar or optical sensors), and the fact that at least two sensors are needed so that distances can be calibrated.

It has advantages, too: It's much more reliable than radar in bad weather; it can't be jammed electronically; it reportedly can give a sharp image of an automobile from a 20-mi. altitude.

Also in the array of aircraft-borne sensors to enforce an arms control agreement might be an **electromagnetic detector** that's still under development. This would keep track of radiation in space, so violations of any ban on bomb testing in space could be discovered. The source of the violation could be traced by reference to the DEW Line and BMEWS Line type of radar surveillance.

Optical sensors in satellites. In the Discoverer series and the Samos development program, the Air Force has been pushing the adaptation of optical monitoring cameras for satellite use. Specific details of the equipment to be carried by Samos are top secret. But insiders say it will be capable of radioing photographs back from 300 mi. up with as much detail as the human eye can see at 1,000 ft.

In polar orbit, one Samos could in time photograph most of the world's surface; several of them in polar orbit should be able to keep a running record and report back any surface changes in a matter of hours.

Radar in satellites. The importance of this in an arms control inspection system is still problematical. In theory, it should be a logical adjunct to airborne and earthbound radar networks (BW-Apr.2'60,p126); it should be less limited in range by the curve of the earth. However, it is heavy and bulky.

Satellite-borne radar would have to go aloft in a package that is tremendously heavy, compared with current U.S. rocket payloads. This is mostly because its power requirements are still extremely high. Presumably, however, if this device were adopted as part of an international arms control system, a Soviet booster rocket could be used to put it aloft.

Satellite-borne infrared. On the other hand, satellite-borne infrared sensors could probably be made operational within a year or so. The Air Force's Midas project ran through its early development with few snags, fortuitous developments in several restricted fields, ranging from cryogenics to solar energy,

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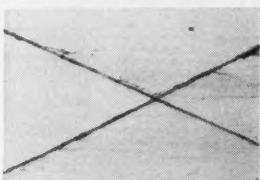
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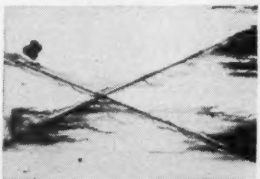
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RUST MAGIC



BRAND A

helped keep the project rolling. According to plans, Midas satellites should be in polar orbit late this year.

As with airborne infrared, Midas sensors would have to be told by other forms of detection devices where to look for suspicious action. But this coordination should be within the ability of today's computer engineering.

Inspection From Ground

There are even more possibilities of enforcing an arms control agreement from the ground, but these are cruder, slower, and in many cases less likely to be accepted by the major powers. They don't match air inspection, in most cases, as precise measurements and broad surveillance.

However, if the U.S. government is willing to scale down its ground inspection plan, accepting the possibility that some violations might slip through, these methods would be much simpler and less costly to put into operation than the high-flying hardware.

• **Ground Patrol**—At the moment, the U.S. and Soviet governments are in a stalemate over the terms of ground inspection to enforce an arms control pact.

At the start of nuclear test ban negotiations, years ago, Russian delegates stood firm on refusal to consider unlimited inspection. They insisted that inspection be subject to veto, even that it be carried out by nationals of the country to be inspected. Khrushchev eventually agreed to three on-site inspections per year, free from veto; he said he would grant permanent inspection teams freedom of access to any suspect areas.

The U.S. and Britain proposed 20 annual inspections, equivalent to roughly 20% of the average number of "seismic events" in Russia above the seismic of 4.75 (roughly the seismic reading produced by an underground explosion of a 20-kiloton nuclear device).

Indications are that the U.S. will now agree to fewer than 20 on-site inspections per year, but only if such a concession will win agreement for a workable over-all inspection system.

• **Open-Lab Policy**—Some scientists have suggested that one way to implement any arms control agreement would be to open up the laboratories of the

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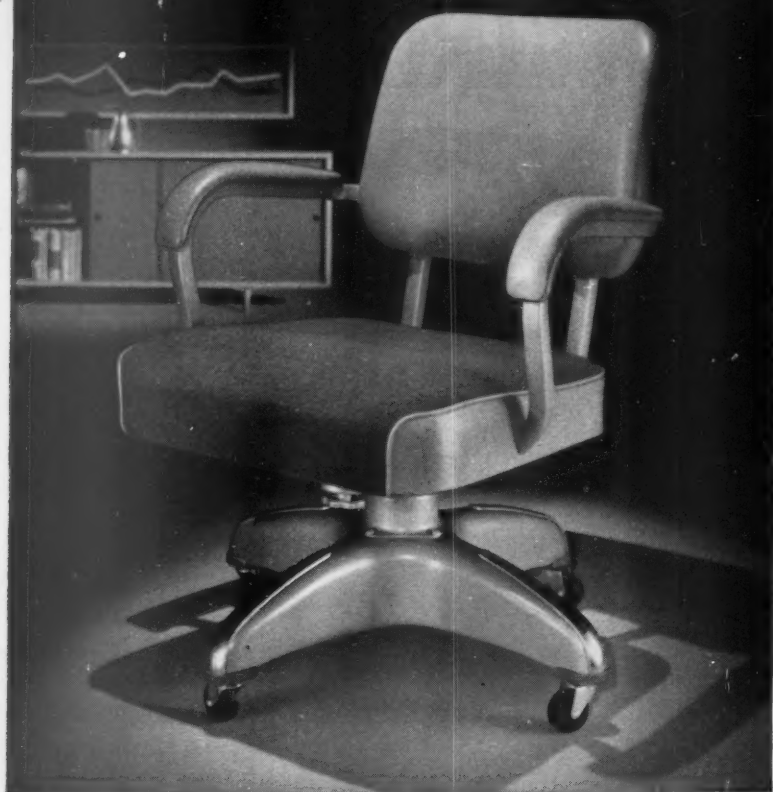
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world, to make them readily accessible to scientists of all nations.

It sounds like a promising theory. Information from the root source of the armament race would be available to everyone; with ample time for discussion, diplomats could negotiate to ban the development of weapons.

In practice, however, it might be the hardest of all ideas to put into effect. Moreover, not all important research comes from fancy laboratories or big scientific staffs, and ideas are far easier to conceal than hardware. In fact, in the most theoretical areas of research, the first implications of new ideas are usually lost on all but the few experts in the particular field of knowledge.

• **Cloak and Dagger**—Spies would certainly play a part in the policing of any arms control agreement. They would be extremely useful, for example, in detecting the early signs of a buildup in industrial plant to support a new armament effort.

It would be a valuable service if spies could report laboratory work on new biological or chemical warfare agents. But even if they could only sniff out the assembling of scientists for "unannounced projects," they would be doing what no machine, however sensitive, can do.

• **Evidence in Statistics**—Better use of official statistics of other nations can also be illuminating, experts say. Figures on budgets, national product, transportation, use of power or fuel—all can be telltales of a stepped-up military effort. U.S. intelligence has been watching such figures for years. But a program to evaluate data scientifically and much faster would be very useful.

The new availability of giant computers and techniques for programing them should make an increased use of statistics possible. But one big problem remains: to work out a way of translating unlike forms of data so a computer can interpret it meaningfully.

• **Earthbound Devices**—Among scientists working on electronic detectors to be used on the ground, there is a grow-



ing conviction that the U.S. will soon be in a much better negotiating position in any arms control discussions. But no specific details of the developments that arouse such optimism have been released.

It's no secret, though, that a great effort has been bent toward developing seismic, acoustic, and electromagnetic devices in the past couple of years. In October, 1958, U.S. delegates to the test ban meetings in Geneva were rudely awakened to the realization of what our own underground bomb tests revealed: The art of concealing nuclear bomb tests had surpassed the art of detection. (BW—May 14 '60, p126).

Use of a technique known as "decoupling" reduced the seismic effect of a nuclear blast underground by a factor of 300. Thus, a 300-kiloton underground test shot (15 times as large as at Hiroshima) could be reduced in effect to a 1-kiloton shot; it takes only a series of 10- to 20-kiloton blasts to develop small bombs.

• **Checking All Points**—Geologists insist that it's reasonable to assume that, with better sound-filtering devices and more detection stations, it will be possible to refine seismic detection devices considerably. But nuclear physicists can't be sure that this refinement will ever be entirely reliable.

However, these scientists point out that instruments are already available to monitor other sorts of nuclear tests. Ground stations can keep tabs on the microscopic quantities of elements in the air—the 30 or so elements that are produced by any fission reaction in the earth's atmosphere. Hydrophones can check on any underwater bomb tests. And there are reasons to suppose that nuclear testing in space could not avoid detection.

One possible solution: to agree on a ban on all atmospheric and underwater tests, along with a moratorium on underground testing until a joint research program has enough time to explore all detection possibilities. However, when last heard from, the Russians were refusing to agree to any such joint effort.



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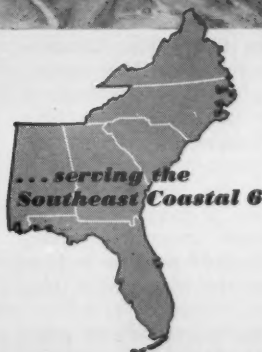
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5. Can U.S. and Russia Negotiate A

Pres. Kennedy's top disarmament advisers are well along with their efforts to put together a new U.S. policy on arms control. Some of the main pieces already are falling into place—the broad goals the U.S. must shoot at, the shifts needed in our defense policy if arms control is to make sense, the technical requirements of various types of inspection.

On these points, and many others where the problem is to get agreement within the Administration, the members of Kennedy's disarmament team feel pretty sure of the ground, and the remaining uncertainties don't look too important.

It's a different story, though, when these men turn their attention to the problem of getting agreement with the Soviet Union on arms control. In this area, there is scarcely anything but uncertainty. No one knows whether Moscow is really interested in the mutual control and regulation of nuclear weapons, or even whether the Soviet leaders are seriously worried by the speed with which the capacity to make H-bombs is spreading around the world (map).

Moreover, U.S. officials can't be sure what effect East-West tussling in such places as the Congo and Laos may have on Moscow's willingness to negotiate on arms control, or what effect it will have on the Administration's freedom of action here in the U.S.

• **Little to Go on**—The key question, of course, is whether Moscow has any genuine interest in arms control. On this all-important point, Kennedy's disarmament advisers are no better able to come up with an answer than were former Pres. Eisenhower's aides a year or two ago.

Now, as then, U.S. officials have little more to go on than broad assumptions about the common interests the U.S. and U.S.S.R. seem to share in this field. These assumptions add up to a feeling that Moscow basically has the same interest as the U.S. in slowing down the arms race and reducing the danger of a nuclear war.

• **U.S. Defense Shifts**—The Administration itself may find the U.S. negotiating position a bit sticky as a result of decisions now being made to alter somewhat the balance of U.S. defense. In his defense program, Kennedy clearly intends to call for stronger conventional forces and a greater concentration of our missile strength in second-strike—or retaliatory—weapons such as the Polaris and the Minuteman (page 69).

Although the first of these policy shifts is intended to reduce our reliance

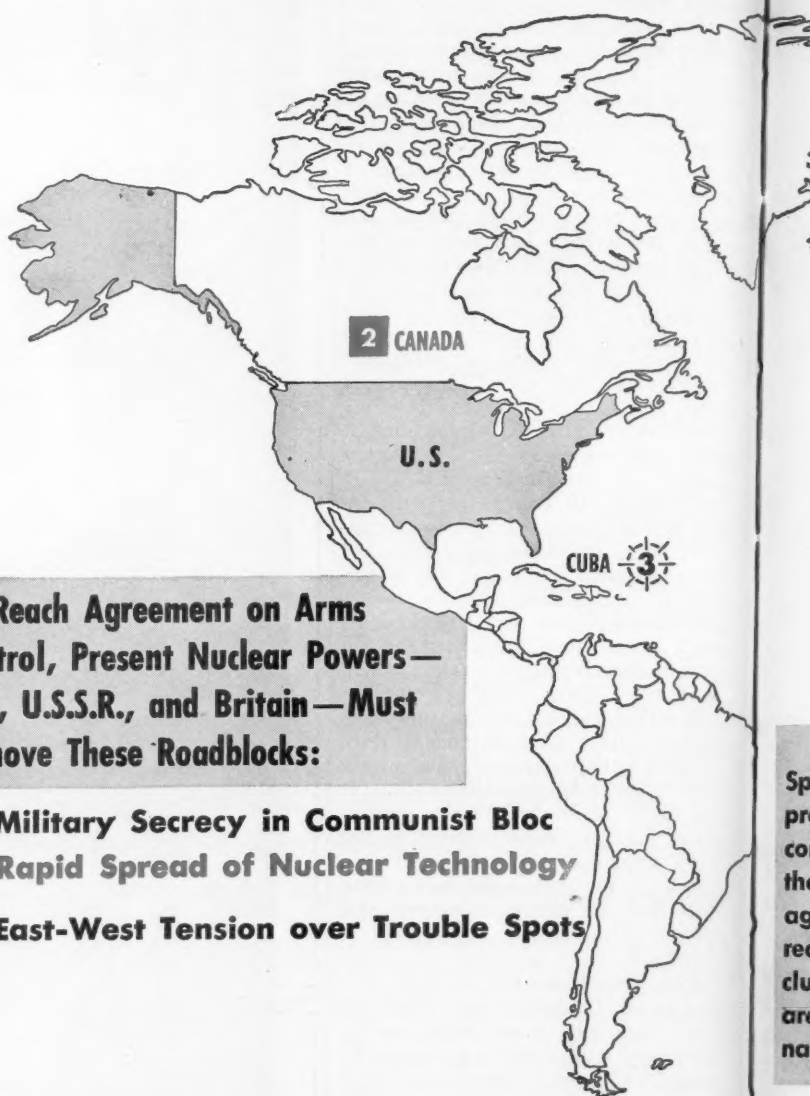
on nuclear weapons and the second to make our nuclear deterrent more stable, it may be hard to convince the Russians that these are the real reasons for the changes.

• **Test Ban Question**—On the nuclear test ban issue, to be sure, there is a long record of negotiations during which the U.S. and Britain on one side and the U.S.S.R. on the other have moved closer together on many disputed matters. But even on this relatively minor step toward arms control Soviet intentions are far from clear. And there's no assurance that they will become clearer at the test ban negotiations that resume in Geneva next week.

Because nuclear technology is spread-

ing so fast today, there is some doubt in Washington as to whether a test ban would mean much, even if agreement could be reached among the three negotiating powers. There would still be France to reckon with. Before too long Red China and Israel will also be able to produce nuclear weapons, and other nations also have the potential. Presumably the U.S. and Britain would bring pressure on France and Israel to refrain from testing, while the Soviets did likewise in the case of Red China. Whether either our effort or theirs would be successful is another matter.

The proposed test ban treaty calls for establishing a worldwide system of con-



To Reach Agreement on Arms Control, Present Nuclear Powers—U.S., U.S.S.R., and Britain—Must Remove These Roadblocks:

- 1 Military Secrecy in Communist Bloc**
- 2 Rapid Spread of Nuclear Technology**
- 3 East-West Tension over Trouble Spots**

Arms Control?

ARMS CONTROL



trols within six years of the original signature by the Big Three. If all nations had not been signed up by then, parties to the treaty would be absolved of their commitments.

• **World Politics and Arms**—In the world political arena other kinds of problems are looming up as a result of the revolutionary tide sweeping through Asia, Africa, and Latin America. Khrushchev clearly intends to exploit this situation. But if he pushes the West too hard in the trouble spots and also maintains his assault on the integrity of the United Nations, it will be difficult for Kennedy to negotiate with him on arms control.

So far, the Administration is trying

to keep the worldwide political struggle and arms control in more or less separate compartments. It is moving ahead on the assumption that it may be possible to reach arms control agreements even if political tension remains high in such spots as the Congo, Laos, and Berlin.

High-Priority Goal

Whatever the international uncertainties, the Administration has made the pursuit of arms control a matter of long-term policy, and has given it a high priority. Even if the test ban negotiations were to fail, the Administration probably would still try for

agreement in other areas, perhaps propose a larger arms control package incorporating a test ban.

Behind this determination to persist in its efforts to reach some kind of arms control agreement lie two things—a relatively narrow calculation and a broad, long-run objective.

• **Political Symbol**—Political expediency is the essence of the first. Around the world, as well as in the U.S., there is growing pressure on governments to do something to diminish what John McCloy, director of the U. S. Disarmament Administration, has called the "ever-increasing menace of a nuclear disaster." As leader of the Free World, the U.S. can't ignore this senti-



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ment. The pursuit of arms control may not pay any political dividends in France today, but it does in Britain, Japan, and most other allied countries. And it has become almost indispensable to our standing in relationship to the new, neutralist nations of the world.

This factor weighs heavily in Washington's determination to get a test ban treaty signed if at all possible. In pressing for this agreement, the Administration is thinking almost as much of the symbolic value a treaty would have as of the role it might play in opening the door to discussion of more meaningful forms of arms control.

In Moscow, too, there may well be motives for signing a test ban treaty that go beyond the desirability of a test ban itself. Some U.S. officials believe Khrushchev will sign a treaty to impress his own people and the outside world with his peaceful intentions. He also seems to want to get on better terms with the Kennedy Administration without having to limit his backing of revolutionary movements around the world. And he may figure that a test ban treaty, even with inspection, would be a price worth paying for this objective.

• **Long-Run Aim**—The Administration's basic purpose, however, lies not in this limited aim but in the long-run objective: to slow down the arms race as soon as possible and ultimately rid the world of any serious threat from nuclear weapons. Total disarmament is an even more distant objective—one that U.S. officials such as McCloy refuse to discuss except in the context of a world order "in which agreed and reliable procedures are set up for the just settlement of disputes."

Assessing the Chances

Washington knows there is no more chance of Khrushchev agreeing to disarmament on these terms than there is of Kennedy buying the Soviet Premier's proposal for "complete and general disarmament in four years."

But there are officials in the U.S. disarmament organization who believe that Khrushchev may agree to a test ban, then go on to conclude at least limited agreements on arms control.

According to these officials, Khrushchev has much the same reason as Kennedy for wanting to reduce the danger of war and cut down the cost of the arms race. This is why he has softened the Communist line on the inevitability of war and now insists that Communism can win the world by "peaceful competition."

• **Skeptics**—However, against this hopeful view you have to set another that probably has much more currency in Washington today. This is the belief that Khrushchev's new line doesn't necessarily indicate any interest on his

part in an arms control system that would involve all the elaborate machinery for mutual inspection the U.S. wants. Some European diplomats with experience in Moscow doubt that the Soviet leaders take the danger of nuclear war seriously enough to accept such inspection.

Moreover, say the skeptics, the Soviet Union's closed society gives it a great military advantage over a free society such as ours, and Moscow won't give this up easily. What really counts today is the much greater capability the Russians have for maintaining secrecy about the precise location of their missile-launching sites. In private exchanges, Russian officials argue that all the U.S. talk about inspection really means that we plan to use it for spying. Once the U.S. learns in this way what it wants to know, so the Russian case goes, we will simply walk out of any arms control agreement.

• **Consensus**—In Kennedy's disarmament group, the differences between the "optimists" and the "pessimists" eventually cancel each other out. The consensus that results comes to this: It will be a long and difficult process to work out meaningful arms control agreements with Moscow—but there's a reasonable chance, in the end, that the Soviet Union will see the need for arms control.

This generally accepted view isn't based on any solid evidence that's available today. So far as it isn't pure hunch, it is usually derived from a projection of current trends in the world and an appraisal of how these trends are likely to affect Soviet policy.

• **Rostow's Appraisal**—Two influential members of Kennedy's disarmament team made projections of this kind shortly before they were appointed.

Walt W. Rostow, deputy assistant to the President for national security, has summed up his position in an article recently published in the *Massachusetts Review*. As Rostow sees the future, both the U.S. and the U.S.S.R. can expect to witness a wide diffusion of power in the world over the next decade or two, and in time each can expect to be no more than one among a number of "middling powers."

As Rostow puts it in his article, "both countries face the disturbing consequences of the diffusion of power on the world scene and that particularly dangerous form of it which involves the distribution of the power to make atomic weapons."

In Rostow's opinion, Moscow still hasn't faced up to this fact. It is caught between two visions of the future. The first is "of an ideological victory in the underdeveloped areas which will give to Communism the balance of world power and which will isolate the U.S. and Western Europe."

And the second is "of a world where power, including the power of nuclear weapons, is being diffused in ways which threaten the Russian interest; and in which the only logical course is to make common cause with the U.S. to establish a minimum framework of order."

However, Rostow seems to feel it is almost inevitable that the U.S. and the U.S.S.R. should come to terms on arms control while they still have the "primacy" of power to build a world order that is made secure by an effective system of arms control.

• **Struggle, but Some Hope**—Paul H. Nitze, who now speaks for the Defense Dept. on arms control, expressed a somewhat different view in a report he wrote recently for the Washington Center of Foreign Policy Research.

Nitze sees a struggle between the U.S. and the U.S.S.R. to establish a new world order to replace the 19th Century system that was destroyed by the two World Wars. He sees the Russians fighting to the bitter end for an international order that would be wholly congenial to Communism and wholly incompatible with the American way of life.

As a result, Nitze says, we are faced "with the responsibility of trying to develop another system compatible with our own purposes and with those of the other non-Communist nations and to defend it from Communist attack or subversion while it is being built."

In spite of these conflicting goals, Nitze still sees a chance that Moscow will gradually come to recognize the advantages of enough arms control to make mutual deterrence more reliable, stable, and secure.

The important thing today, Nitze argues, is to convince the Russians that it is in their interest to restrict themselves to a second-strike, or retaliatory, nuclear capability such as the U.S. is planning, and to have the U.S. know they are accepting such a restriction.

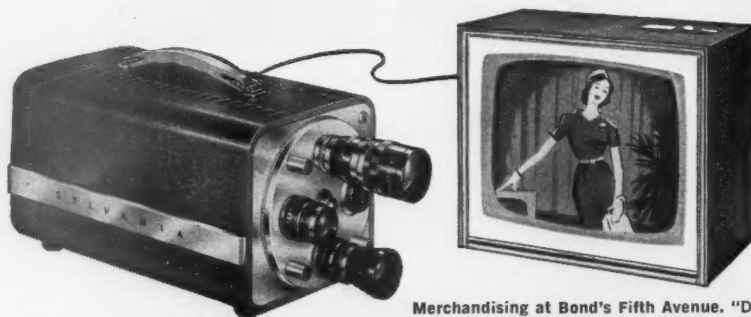
"Only if that condition can be met," Nitze says, "do I see much hope that arms control agreements will add to the stability of international nuclear relationships—to the prospect that the Cold War can be kept cold."

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Simultaneous announcements of two new films came out of the labs of Polaroid Corp. in Cambridge, Mass., and Eastman Kodak Co. in Rochester, N. Y.

Polaroid has a new 4x5 film packet that gives the photographer both a print and a negative in 15 seconds. The negative and the print are both developed right inside the packet, while in the camera. When the photographer wants to make more prints, all he has to do is wash the negative in water or a chemical bath to remove developing agents—no darkroom is needed.

The negatives obtained with the packets are of unusually fine quality, says Polaroid. The company claims that it has made enlargements from them 13 ft. high that show virtually no sign of graininess in their texture.

One variety of the company's older film packets also produced a print and a negative, but the print took 60 seconds to develop in the camera, and the negative had to be developed by something like conventional means in a darkroom.

• **Special Holder**—The new film packets each contain a paper sheet for the print, a sheet of film for the negative, and a little foil pod that carries the developing chemicals. Polaroid sells a special holder for its film packets that fits any standard 4x5 camera. The holder contains rollers that spread the developer over the film as the packet is pulled between them.

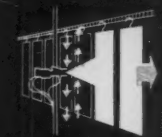
Polaroid hasn't set prices for the film packets yet, but hopes to keep them in line with its older packets.

• **New Color Film**—Kodak is offering a revised version of its Kodachrome color film for 35 mm. and 828-size still cameras and 8mm. and 16mm. movie cameras. The new Kodachrome is 24 times faster than its predecessor, and is made with thinner emulsion. This means, says Kodak, that you can take pictures with the new film using smaller lens apertures and higher shutter speeds than can be done with the old. The result is increased sharpness and field depth as well as greater ability to stop motion.

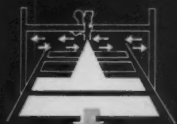
Cost of the new film will be roughly 10% higher than the older Kodachrome. For the time being, it will be available commercially only in limited quantities. **END**



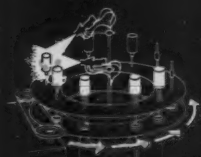
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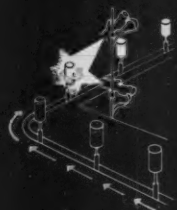
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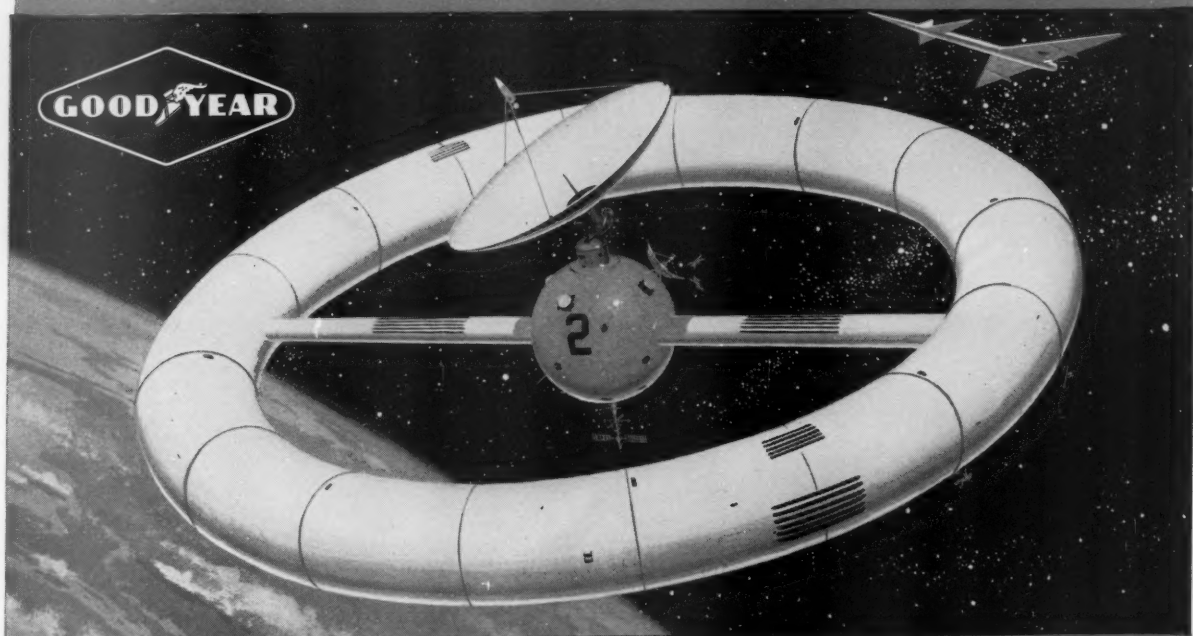
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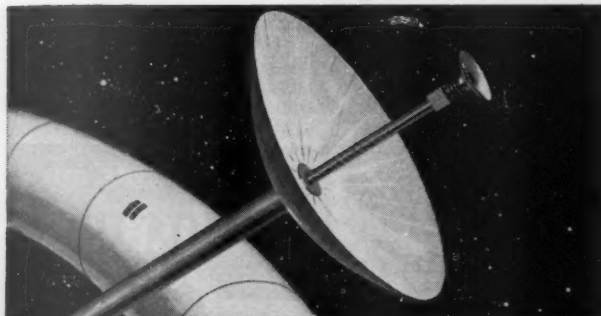
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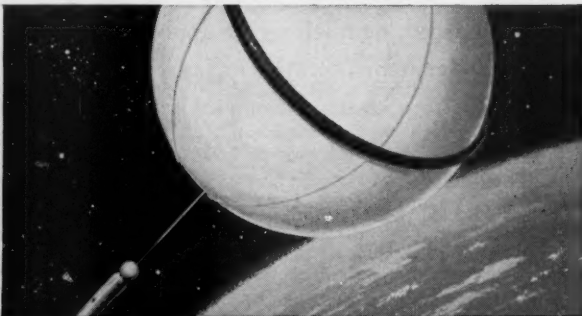
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FINANCE

The Billion Dollar Giants of Life Insurance

COMPANY	ADMITTED ASSETS			PERCENT INCREASE		INSURANCE IN FORCE	PERCENT INCREASE		NET RETURN ON ASSETS BEFORE FEDERAL INCOME TAX	
	Millions of Dollars	1960 over 1959	1959 over 1958	1960 over 1959	1959 over 1958	Millions of Dollars	1960 over 1959	1959 over 1958	1960	1959
Metropolitan Life Ins.	\$17,941	4.7%	5.3%			\$94,246	4.7%	6.9%	4.08%	3.91%
Prudential Insurance	16,551	5.6	6.4			82,183	6.9	9.0	4.40	4.19
Equitable Life Assurance	10,039	3.9	3.9			38,437	7.9	6.8	3.95	3.82
New York Life Ins.	7,158	3.4	3.2			24,044	7.4	8.3	3.90	3.82
John Hancock Mutual Life Ins.	6,127	4.9	5.9			26,184	8.1	8.7	3.96	3.82
Northwestern Mutual Life Ins.	4,198	3.6	3.8			10,411	5.2	6.0	4.27	4.14
Aetna Life Ins.*	4,031	6.1	7.0			24,311	5.9	6.8	3.78	3.66
Travelers Insurance*	3,316	3.8	3.9			26,961	7.1	9.2	3.94	3.81
Mutual Life Ins. Co. of N. Y.	2,762	2.4	2.1			8,141	10.1	8.8	4.26	4.15
Mass. Mutual Life Ins.	2,440	4.8	5.1			8,278	9.7	12.0	4.20	4.07
Conn. General Life Ins.*	2,232	7.1	8.2			11,373	8.1	9.0	4.17	4.03
New England Mutual Life Ins.	2,211	4.2	4.8			7,043	7.0	8.5	4.10	4.00
Mutual Benefit Life Ins.	1,870	2.5	2.5			5,595	11.8	11.1	4.12	4.01
Penn Mutual Life Ins.	1,816	2.9	2.3			5,249	6.1	6.3	4.03	3.89
Conn. Mutual Life Ins.	1,594	5.1	5.6			4,700	8.0	8.8	4.40	4.19
Lincoln Nat. Life Ins.*	1,491	5.1	4.4			10,570	7.5	7.0	4.06	3.97
Bankers Life Co. (Iowa)	1,094	6.2	5.7			3,760	5.9	8.5	4.20	4.09
Western & Southern Life Ins.	1,059	5.8	10.5			5,241	7.1	8.0	4.13	3.92

Data: Alfred M. Best Co., Inc.

*Stock companies

©BUSINESS WEEK

Tougher Battle to Pile Up Growth

At the end of 1945, life insurance assets totaled some \$45-billion. Today, they are close to \$120-billion, making life insurance one of the great growth industries in the U. S.

It has been a case of the rich getting richer—and of others trying to get into the act. As of Dec. 31, 1960, the 18-billion-dollar giants in the field (table) had admitted assets—the assets that state insurance departments allow life companies to count on their official statements—mounting up to \$88-billion. This is almost three-quarters of the industry's total assets. The balance of the life insurance business is split up among more than 1,450 other companies, and more are being formed every day.

Most U. S. life companies are stockholder-controlled—the stock companies total about 1,300, compared to just over 150 mutual, or policyholder-controlled, companies. In assets, however, the mutual companies are way ahead; they hold about three-quarters of total life insurance assets.

• **Tax Problems**—This massive growth, of course, doesn't mean that life insurance companies have achieved a problem-free existence.

For one thing, life insurance taxation—though still low in comparison to most corporate taxes—was boosted sharply in

1959. This led to a temporary setback in the rate of earnings growth for the stock companies—the mutuals don't report earnings on the same basis, since they return profits to their policyholders—and a short-lived selloff in their shares.

• **Slowdown**—Another current problem arises from the fact that the terrific growth rate maintained by the life companies in the last 15 years is starting to slow down. From 1945 through 1955, life company assets were expanding at a steady rate of 7% or better; from 1956 on, this rate of growth has dropped fairly regularly—in 1960 it was down to 5.1%.

In part, this reflects a slowdown in growth in the general economy—sales of new life insurance have always been closely tied to the level of disposable personal income. But it also reflects increasingly sharp competition for the savings dollar, particularly from savings and loan associations and mutual funds, as well as from commercial banks, which have been successful in soliciting industrial pension business away from the insurance companies.

Competition is also sharpening within the life industry itself. Leading fire and casualty companies have been setting up life insurance subsidiaries, and now can offer their customers one-stop,

multi-line insurance service. To counter this, Connecticut General Life Insurance Co., one of the largest stockholder-controlled life companies, is fighting a court case to establish its right to take over a casualty company while continuing to operate in New York State.

Thus, though the industry will go on growing, its growth will be slower—and tougher. Gordon W. McKinley, economist for the Prudential Insurance Co. of America, calls the 12% growth rate that prevailed in life insurance sales during the 1950s "abnormally high." He predicts a growth rate of about half that figure for the 1960s.

• **Boomerang**—To an important extent, some life companies' own sales tactics have been responsible for the slowdown in the rate of their growth. Traditionally, compensation for a life insurance salesman has been keyed to the face amount of the policies he sells. Virtually every large life company has a bonus or special recognition for a salesman who sells a million dollars or more life insurance in a given year.

Such incentives have always been successful in promoting sales, but some companies are coming to feel that—more by accident than choice—they have promoted the wrong kind of

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sales—pushing term insurance rather than permanent, whole life policies. Here's how this reasoning goes:

For a young man, a given amount of term insurance—this is life insurance that provides protection only for a fixed period of time—costs in premiums only a small fraction of a permanent policy for the same amount. So, if his prospect heads a family with limited income, the salesman will naturally be inclined to push term insurance.

For the life company, however, this presents problems, because term insurance does not produce anywhere near the cash flow of a permanent policy.

• **Selling Less to Make More**—To meet this problem, a number of the biggest life companies, including Metropolitan Life Insurance Co., the largest of all, are switching the emphasis in their sales compensation from total life insurance sold to premium volume produced. It's this shift, says Met's Chmn. Frederic W. Ecker, which was responsible for the fact that the Met's sales of individual policies dropped about \$1.2-billion in 1960 compared to 1959. Ecker isn't worried because, in spite of this drop, the Met's premium payments on new 1960 business rose by about 8% over 1959.

This change in policy isn't limited to the Metropolitan alone. Most of the large life companies reported a smaller increase in life insurance in force last year than in 1959 (table, page 97), and over the whole industry the gain in life sales was a mere 1.7%. But though the rate of gain was limited, total sales are still a pretty impressive figure—\$72.3-billion.

• **Pension Worries**—It's in the pension field, though, rather than in sales of individual policies, that the life companies' competitive worries are greatest. In this field, they have run up against two advantages possessed by their bank competitors:

• Until recently, bank-trusted pension funds have been completely tax-exempt, while insured funds have been subject to a small, but significant, federal tax. This law was changed in 1959 to put the insurance companies on an equal footing with the banks, but the change won't be fully effective until the end of this year.

• The banks have almost complete freedom in setting investment policy for a pension fund. Insurance companies, on the other hand, are severely circumscribed by state laws, particularly in the matter of buying common stock. For the life industry as a whole, in fact, total common stock owned at the end of 1960 came to only \$3.1-billion, or 2.6% of total assets. And since the stock market has been generally rising during the past decade, corporations have been

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FINANCE

Those Fat Profit Margins Abroad

- U.S. companies find their overseas operations providing an ever-growing proportion of their earnings.
- Oil industry profits, the biggest single factor, have been slipping sharply since 1957.
- But manufacturing companies, making up a quarter of the total, have been climbing for three years.

But Canada and European countries benefited from higher manufacturing receipts.

● **Big Foreign Earners**—More impressive than those over-all figures are foreign sales, earnings, and investment return of individual companies.

H. J. Heinz Co. earned more than two-thirds of its total income overseas last year—or \$8-million out of \$12.4 million. Chas. Pfizer & Co. and Schering Corp. earned more than 40% of their

International Business Machines

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eager to take advantage of the climb in prices by investing their pension funds heavily in equities, which most insurance companies are legally prevented from doing.

It's too early to tell just how much good "tax equality" between bank-administered and insured pension plans will do the insurance companies. Some insurance men say that they "are definitely having an easier time," but bankers claim they still take pension business away from the insurance companies.

● **New Competitive Angles**—The insurance companies, however, are coming up with some new ideas to compete for the pension business. The Prudential, for one, is pushing for the sale of variable annuities, which are based on the changing value of a common stock portfolio and which will be sold in a package along with a fixed-income annuity.

In Connecticut and Massachusetts, other companies have been successful in obtaining legislative approval for "segregating" their pension assets from their regular life insurance business, in order to increase the proportion of common stock in these segregated accounts. But to date, legal technicalities have blocked the sale of any pension plans based on segregated accounts.

● **New Weapon**—The life companies are also seizing on a new weapon to sharpen competition—the offer of so-called "new money guarantees" to prospective pension customers. These are guarantees that the pension account will be credited with earnings that are equal to the rate that the insurance company is earning currently on all the newly invested funds in its portfolio. Conventional pension plans normally guarantee a rate equal only to the average return the insurance company is making on all its funds. For most life companies, this can be a substantial difference. To cite just one example, last year Mutual Benefit Life Insurance Co. earned 4.12% on its over-all portfolio (which is exactly the industry average) while its earnings on new money came to 5.29%.

The banks, however, are trying to turn these new money guarantees to their own advantage. They are telling holders of existing insured pension plans—that those that are being credited only with earnings at the average over-all rate—that the new money plan involves "rank discrimination," and that they should move into a bank plan where "your pension fund doesn't get lumped in with everybody else's." The insurance companies counter that the new money scheme is "completely equitable," and they're working hard to impress the New York State Superintendent of Insurance, Thomas Thacher, who must rule on the plan, with this view. **END**

INTERNATIONAL OUTLOOK

BUSINESS WEEK

MAR. 18, 1961



The Alliance for Progress that Pres. Kennedy proposed this week to aid Latin America (page 30) is a call to constructive revolution. The President is trying to substitute a bloodless social and economic revolution for the bloody Communist movement that Fidel Castro advocates (BW—Feb. 18'61,p61).

Kennedy's program is a grand design, the first that a U. S. Administration has espoused for Latin America since the 1930s. But, there is a specter of unreality about it that leads to skepticism. Look at the impediments:

- **Latin American vested interests.** In many countries, a traditional establishment is encrusted atop society and will not be easily scraped off.
- **Latin American inertia.** The initial reaction to Kennedy's pronouncement was less than enthusiastic in the republics to the south. Some Latin Americans were favorably impressed but more felt as the Argentine who said, "\$500-million is not enough even for a round of drinks."
- **U. S. political opposition.** Some politicians and Washington bureaucrats will probably insist that the Latin American governments join in collective measures against Castro as the price of more U. S. assistance. But most Latin Americans are now against this move.
- **U. S. business opposition.** Kennedy's plan implies revisions in U. S. tariffs and import quotas, which U. S. producers will not like. Its provision for commodity price stabilization may raise prices of raw materials and oil, which buyers will oppose.

Some ideological opposition may be generated in the U. S. by the emphasis on government economic planning. The over-all coordinating agency will probably be the Inter-American Economic & Social Council. Each nation will be required to undertake reforms in taxation, landholding, and fiscal management before receiving aid.

This may lead some Latin American governments to adopt the approach that India has taken in its five-year economic development plans. The Indians have delineated their economy into private and public sectors, with government planning for both.

International currency markets have settled down considerably this week after a speculative storm following the revaluation of the West German mark (page 31). But this episode, which brought unexpected pressure on both the dollar and the pound, has sobered most central bankers and international currency experts.

They have known for some time, of course, that the international monetary system was creaking under the weight of short-term money movements. Now they seem pretty well convinced that the system must be changed soon or it may actually crack—bringing on an international financial crisis.

You could put the problem this way: Either the system will have to be modified so that it can absorb massive shifts of short-term funds or these transfers will have to be checked by exchange controls.

Some experts believe the problem could be met if the big industrial nations adopted fluctuating exchange rates. Then, if pressure developed on a nation's currency, it would be translated temporarily into a lower rate of exchange and not into a dangerous loss of reserves.

There's another school that insists the only solution is to revamp the International Monetary Fund in such a way that it can carry the burdens 103

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MAR. 18, 1961

now imposed on the West's two reserve currencies—the dollar and the pound.

Any way you look at it, there is an urgent need for close monetary coordination among the advanced industrial nations. The question is how to get this coordination before a crisis hits.

—•—

The Union of South Africa this week pulled out of the Commonwealth rather than accept condemnation of its harsh racial policies. The move came during a stormy session of Commonwealth Prime Ministers in London.

Racial separation in South Africa (apartheid) has long been under criticism from the rest of the multi-racial Commonwealth. The issue came to a head when the Verwoerd government declared South Africa a republic, making it necessary to reapply for Commonwealth membership. The other members would agree only if South Africa accepted, as part of the readmission process, a public denunciation of apartheid. Verwoerd refused to do this.

London at midweek was full of speculation about the consequences. Some observers fear the Commonwealth will gradually disintegrate now that the original "white" membership has cracked apart. But others figure that it will gain strength as a multi-racial association.

Londoners were also predicting that:

- There would be increased dissension in South Africa itself between the more liberal whites, mostly English, and the Dutch-descended Afrikaaners who provide Verwoerd with his main backing.
- Britain will find a way to continue its preferential treatment of imports from South Africa such as citrus fruit and wine. But British and other outside capital will continue to leave the Union.

—•—

In Paris there's cautious optimism about peace in Algeria. Barring a last-minute snag, it's pretty certain that the French and the Algerian rebels (FLN) will meet soon to negotiate an end to the six-year-old Algerian war.

Both sides, however, are still poles apart on fundamental issues such as who will get the Sahara oil, whether France can have its way with military bases, guarantees for Europeans, and the length of the transition preceding Algeria's self-determination vote.

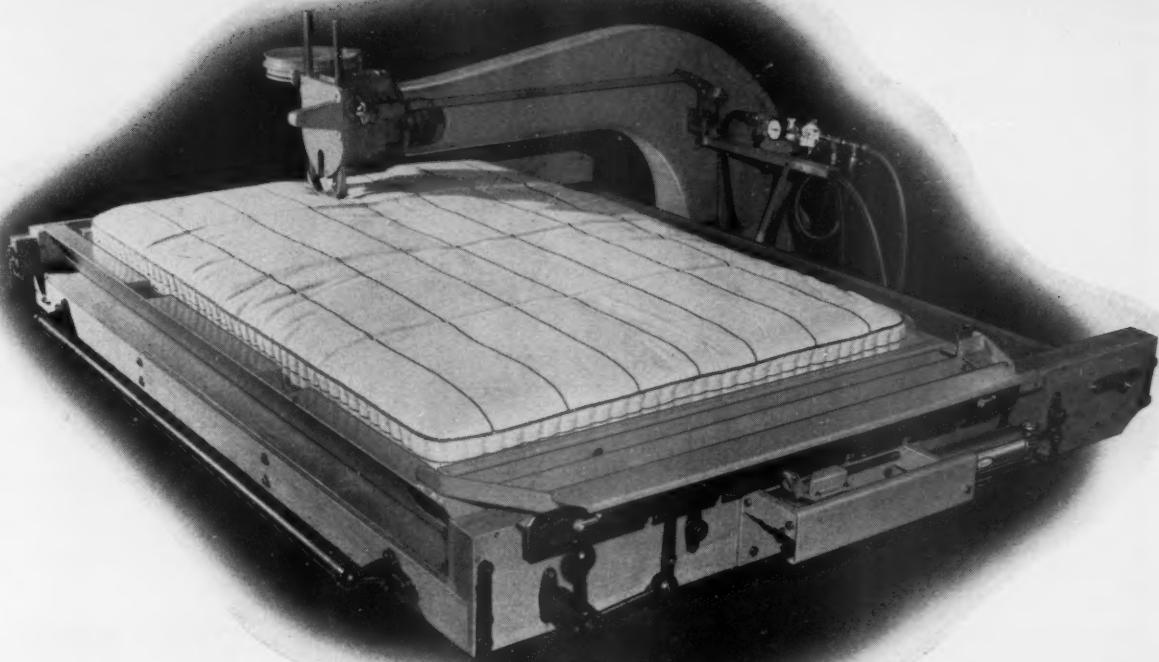
Because of these differences, chances are the two sides will start negotiations on the ministerial level. A meeting between Pres. de Gaulle and Ferhat Abbas would follow if these talks go well—say well enough for a cease-fire to be arranged.

—•—

There may be a series of East-West disarmament talks this year.

In Geneva next week the U. S., Britain, and Russia will resume their negotiations on a nuclear test ban. By summer there probably will be new talks on general disarmament, following up those held last year under United Nations auspices by a 10-nation group.

At best, though, this will be all preparatory stuff. The Administration's real aim is to engage Moscow in down-to-earth negotiations on a mutually acceptable arms control system—one that would halt the nuclear arms race and make mutual deterrence more reliable and stable (page 54).



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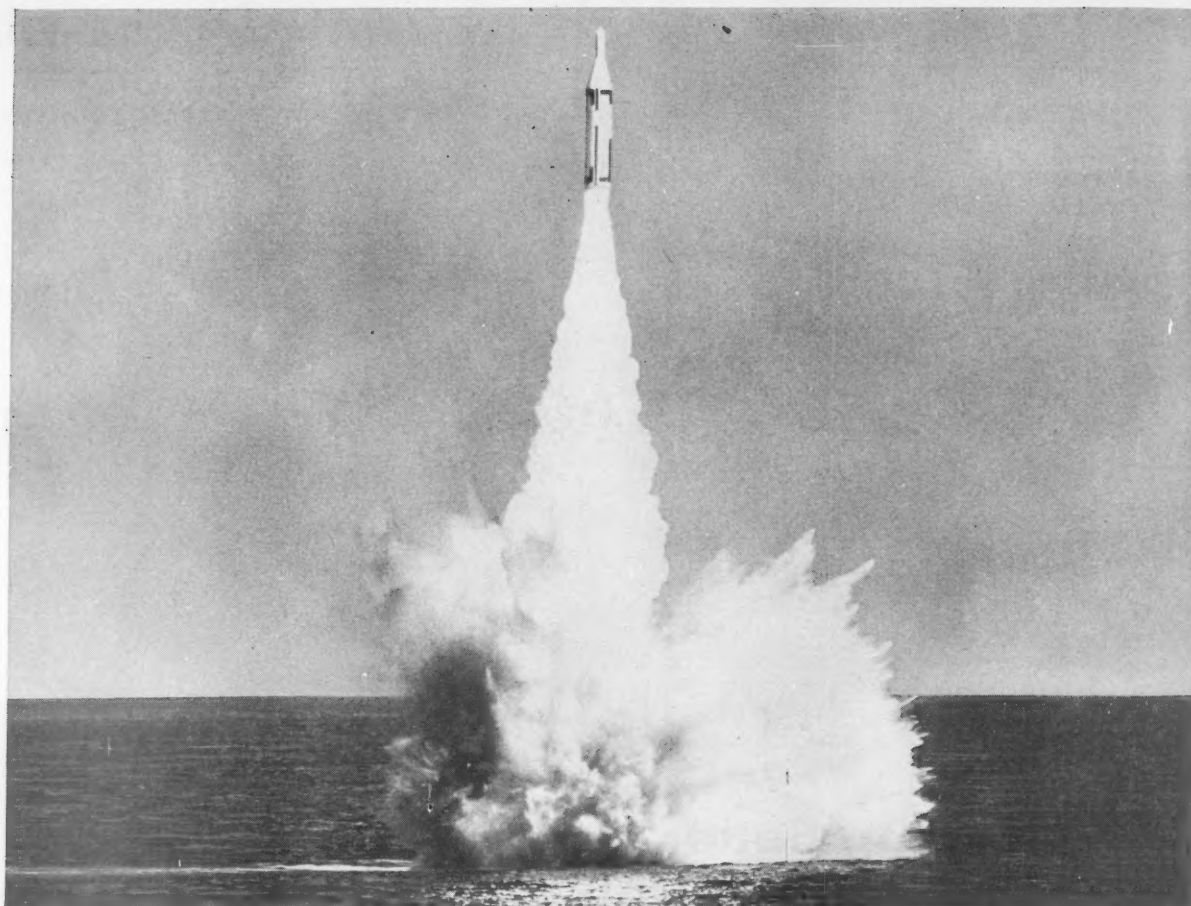
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The *USS George Washington*, first of the nation's nuclear-powered, missile-launching submarines, is now on operational patrol as a deterrent weapon of awesome power.



Cutaway model of *USS George Washington* shows location of Polaris launching tubes amidships.

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of the advanced nuclear attack submarine, *USS Thresher*, including steering and diving systems, masts, periscopes, and sonar devices, will be

controlled by Bendix equipment that includes some 290 precision valves.

Another Bendix activity is concerned with the development and building of complete guidance systems for high-speed torpedoes designed to destroy high-performance enemy submarines.

Bendix has even adapted television to submarine use. A unique Bendix TV system enabled the crew of the *USS Skate*, on her historic voyage under the North Polar ice cap, to literally "see in the dark" and thus detect thin spots in the bottom of the ice pack through which the *Skate* could surface safely.



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In Business Abroad

. . .

OEEC Totes Up Four-Year Foreign Aid Bill; U.S. Provided Almost Half of the Total

For the first time, all the various forms of Western aid to underdeveloped areas have been added up in one place. The job was done by the Organization for European Economic Cooperation (OEEC). In a report released this week, OEEC puts total aid at \$27.4-billion for the four-year period 1956-59.

According to the report, the net flow of government and private capital to underdeveloped countries from the 18 OEEC members plus Canada and the U.S. averaged almost \$6.9-billion annually in the four-year period. This was double the amount provided by the industrial nations during 1950-55, and is considerably larger than earlier estimates.

More than half the flow—\$3.6-billion annually—came from government grants and loans. Also included in the over-all figure are private lending and investment (\$2.7-billion) and contributions to international agencies for assistance to underdeveloped countries (\$600-million) a year.

The U.S. provided almost half of the four-year total, and 60% of all government aid—about \$5.3-billion. France was the biggest contributor behind the U.S., with Britain third, and West Germany fourth.

Soviet aid in the same period was about \$600-million in direct grants and export credits picked up by foreign nations. But the study points out that Soviet aid commitments, mostly for funds that have not yet been disbursed, total \$2.3-billion.

OEEC now is tabulating foreign aid totals for 1960. This is one of OEEC's last tasks before giving way to its successor agency, the Organization for Economic Cooperation & Development (OECD). One of the primary objectives of this new 20-nation body will be to coordinate the West's economic aid efforts for underdeveloped areas.

. . .

Brazil Tightens Belt Further; Ends Special Exchange Rate on Imports

To check inflation, Brazil's Pres. Janio Quadros ordered another austerity measure this week. He doubled the special exchange rate for petroleum, wheat, newsprint, and machinery imports, thus practically ending the government subsidies on these products.

Since January, 1959, importers of these products have been allowed to purchase dollars from the Bank of Brazil at the special rate of 100 cruzeiros for one U.S. dollar. The rate will now go to 200-to-1—the same that importers of nonessential items have been paying all along.

The immediate effect of this latest move probably will be a sharp drop in imports of these products due to the 100% rise in their cost and the recent cost-of-living increase resulting from higher transportation costs.

Quadros has been instituting these austerity moves to pare down the potential \$1.2-billion Brazilian deficit this year. Moreover, he has a few more belt-tightening moves ready. In a nationwide address on Brazilian radio and TV, Quadros promised (1) action on bank reform and antitrust laws, (2) tighter restrictions on the remittance of foreign companies' profits abroad, and (3) tax reform, probably including higher rates on income and excess profits.

. . .

Capitol Records Sets Up Electronics Subsidiary

Capitol Records, Inc., U.S. subsidiary of Electric & Musical Industries, Ltd., of London, is setting up a new subsidiary to enable it to manufacture and sell a wide range of electronic products.

Capitol, which up to now has dealt only in the record field, has acquired Voi-Shan Electronics Div. of Voi-Shan Industries, Inc., of Los Angeles and Hoffman Electron Tube Co. of New York and will incorporate them as Electric & Musical Industries (United States).

E&MI, Ltd., Europe's largest maker of magnetic tape and one of the world's two producers of videotape, will introduce its product into the U.S. through the new subsidiary. At the same time, E&MI (U.S.) will push sales of electronic tubes.

The new company will have a Broadcast Div. to market studio equipment, tape recorders, and related products, and a Consumer Products Div. to manufacture and market electronic components.

. . .

Moscow Orders Two Chemical Plants, Costing About \$5.6-Million, From Britain

Moscow has ordered two chemical plants worth about \$5.6-million from Britain's Wycon Services, Ltd., a company owned jointly by Fisons, Ltd., chemical manufacturers, and Constructors John Brown, Ltd.

One plant, costing \$3.8-million, will produce 4,200-long tons a year of a hormone weed killer known simply as MCPA. The other will produce 12,000 long tons a year of dimethylol ethyleneurea, a chemical used in the textile industry. Production at both plants is slated to start in mid-1963.

The contracts, signed last week at the Leipzig Fair, were on a cash payment basis. A Wycon Services spokesman said his company is negotiating with Moscow for still another sizable contract.

. . .

New Way to Be in the Red

A Sao Paulo, Brazil, collection agency has come up with a new angle to shame debtors into paying up.

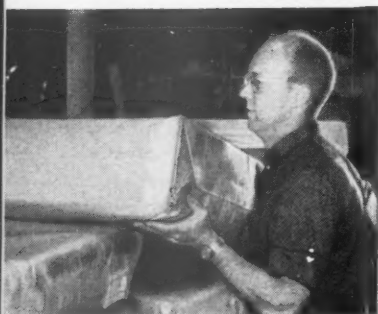
It dresses its collectors in red—fire engine red—from bowler to shoes. If the delinquent debtor survives the shock of the first collection call, the thought of a second under the eyes of jeering neighbors usually gets him.

Do you have any of these

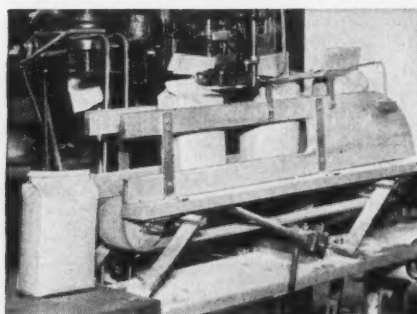
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5 Keep rugs clean and fresh by shipping them in Clupak extensible paper. Stretches to reduce splits and tears experienced with ordinary kraft.



7 Protect tools with poly-coated, flexible Clupak extensible paper. Molds to odd shapes, stretches and flexes with film, resists punctures from sharp edges.



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1 Multiwall bags made of Clupak extensible paper reduce product damage and waste because they stretch to absorb impact which often rips ordinary bags. Stack more compactly, too!



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THE MARKETS

Happy Days on Toronto Exchange

Analysts wonder whether swift rise in Canadian stock prices is a bubble or a boom. Either way, the rise outstrips the U.S.

Brokers on Toronto's Bay Street are feeling pretty good these days, and have almost convinced themselves that their new mood is justified. For Canadian stock prices have been rising ever since last summer; as the chart shows, they turned up earlier than U.S. stocks and now seem to be riding the tailwind of the U.S. market.

But, despite the profits being made in the Canadian market, the financial community is not sure whether it is seeing a bubble or a real boom. The Canadian economy has been in the throes of a much more serious recession than the U.S., and while most economists expect an upturn by the second half, they doubt that it will have much spark.

Canadian investors see a lot of trouble spots. Canada's growth rate, very rapid in the early 1950s, has been faltering since. Unemployment is high—and seemingly chronic. There is a lot of excess capacity in industry, particularly in mining. And there's considerable skepticism about the government's ability to deal with these problems.

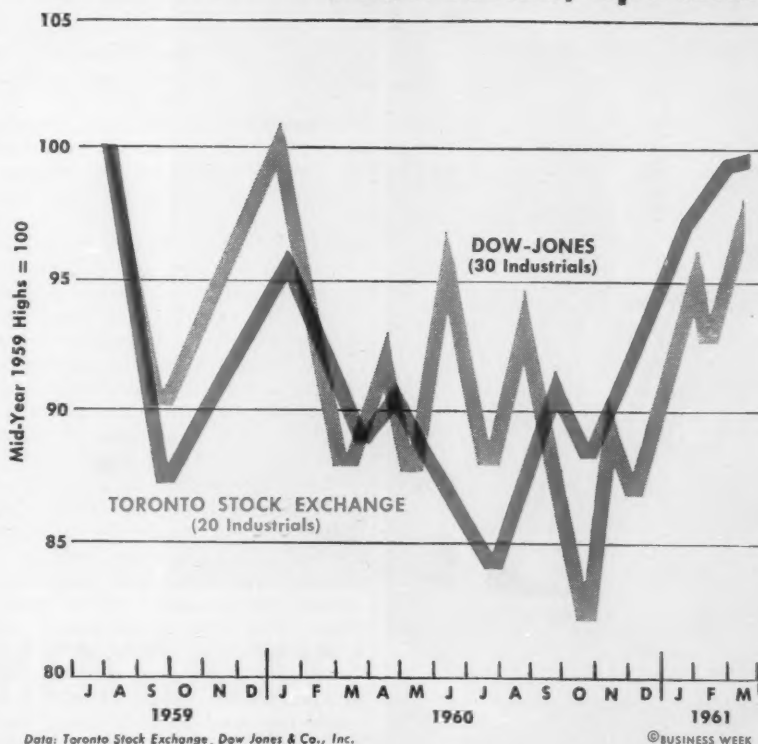
• **Earlier Fall**—The stock market is not exactly shrugging off these question marks. Canadian stocks peaked out several months before the U.S. market hit its high, and fell much further. But then they began rising last summer. Since then the Toronto Stock Exchange's 20-stock industrial index has advanced 18% compared to a 17% rise for the Dow-Jones industrial index.

Relatively speaking, Canadian stocks are lower in price than U.S. stocks. Historically, Canadian issues sell at higher price-earnings ratios than U.S. stocks, largely because analysts have felt that Canadian companies had a greater growth potential. Now, however, the TSE's index is selling at about 17 times earnings compared to over 20 times earnings for the Dow.

This suggests that Canadian stocks could go up. The Toronto market reacts to Wall Street, and if U.S. stocks continue to climb, bargain hunters will move into Canadian stocks. But a sustained rise depends on a big improvement in the U.S. economy.

• **Diefenbaker Program**—The new program of the Diefenbaker government, aimed at boosting exports and holding down imports, is helping the market. Moreover, new regulations affecting

Canadian Stocks: Down Sooner, Up Faster



Canadian institutional investors—mutual funds, pension funds, and insurance companies—also favor Canadian equities, as against U.S. or European stocks. For example, an increase in the tax rate on bond income has forced a number of pension funds to shift more toward equities. Bond yields in Canada have been extremely attractive—running about one percentage point better than U.S. corporates—but the new tax regulations could force a greater shift away from bonds.

Institutional investors don't play so important a role in the stock market as institutions in the U.S. do, but this new buying could add a stability that has been lacking in the boom and bust days of the past.

The government's new oil policy—which calls for a 45% increase in the production of crude oil and natural gas by 1963—also has bullish overtones. Imperial Oil, among others, stands to benefit because of its big reserves in proven fields. However, U.S. brokers report that there has been a good deal of indiscriminate buying of oil shares.

• **Dividends**—Then again, corporate earnings and dividends did not suffer too badly during the recession—with

some notable exceptions in heavy industry. This has led investors to put their chips on consumer-oriented companies, as well as some of the natural resource stocks that are being bought for the long pull. Food companies, for example, are up 29% in the past few months.

At the same time, the major stock exchanges in Canada are taking fresh steps to woo more small stockholders and broaden the base of share ownership—something Canada needs badly. The Montreal and Canadian Exchanges are actively promoting investment clubs; they have set up a trading relationship with Boston, permitting members of each exchange to trade on the floor of the other; and they are opening up a board for international listings.

A monthly investment plan patterned after the New York Stock Exchange's MIP also has been set up by the Montreal exchange—more in retaliation, though, than through free choice. Montreal acted after Merrill Lynch, Pierce, Fenner & Smith introduced the NYSE plan into Canada. This permitted Canadians to purchase only New York-listed securities, which meant



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DODGE
Reports
and
Construction
Statistics

... there has been little demand for low-priced speculative stocks in the current rise . . .

(STORY on page 109)

that business that might have gone to Canadian stocks was drawn out of the country. So Montreal was forced to counter with its own plan.

• **Choosy Buying**—The small Canadian investor is still not heavily committed to equities. Most of the buying is coming from institutions, and lately a trickle of new money has come in from the U.S., Europe—Swiss and British trust buying—and Africa. Most of this sophisticated money is going chiefly into Canada's seasoned companies, not its most speculative ones. There has been strong demand for Bell Telephone of Canada, Falconbridge Nickel Mines, International Nickel, Steel Co. of Canada, some of the big banks and pipeline companies.

This emphasis on investment-grade stocks has been notable in the Canadian market's rise. In the latter part of 1960, the advance was built on defensive issues—banks and finance companies, food processors and distributors, drugs, and utilities—companies with good earnings records and which could be counted on to earn more in 1961. In mid-January, some of the better grade depressed cyclical gained favor; top-drawer steels and construction stocks moved up in anticipation of a pick-up business. Toward the end of the month, base metals made an upward move; so far this year, the big mines are up 27%.

• **Drop in Speculating**—Analysts are clearly impressed at this high-grade tone of the market. In the mid-1950s, many investors were attracted to Canadian stocks solely for quick speculative profits, and centered their efforts on low-priced stocks. But this isn't so true today. In fact, there has been little demand for low priced speculative issues, though such demand could come in a new bull market.

So long as the market isn't buffeted by new speculation, analysts say they do not fear a major decline in prices. However, despite the bullish signs, there is uneasiness about prices. "It is doubtful," says the Swiss Corp. for Canadian Investments, Ltd., "that the business improvement generally expected for later in the year can raise 1961 earnings and dividends sufficiently to justify further substantial gains in equity prices."

A broker in one of Toronto's top brokerage firms adds that "while the market tone is good, I'm beginning to place more and more emphasis on selectivity." **END**



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BW-31



DODGE
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KENTUCKY is rich in raw materials... both natural and man-made

THE managements of probably half the new plants built recently in Kentucky have been heavily influenced by at least one common factor—the proximity and economical availability of the *natural* or the *manufactured* raw materials they need. The latter, of course, have been especially significant in Kentucky's enormous chemical-industry growth, where one plant often leads to another in almost chain-reaction effect.

Kentucky's raw materials include coal, natural gas, oil, limestone, silica sand, fluorspar, ball and fire clay, timber and agricultural products. *Manufactured* raw materials include many chemicals, metals, plastics, coke, synthetic rubber, to name only a very few.

The Kentucky Department of Economic Development has detailed data on all Kentucky raw

materials. In addition, Kentucky's spectacular new geological mapping program is now charting even more minutely the State's vast natural resources. If you will tell us what materials are important in your processes—the volume, type and quality you need—we will be glad to pinpoint those areas in Kentucky which offer you the greatest advantages in your competitive struggle for progress and profits. You will not be deluged with overly optimistic generalities. We will give you the facts you need, in the way you need them. Your inquiry will be held in strictest confidence.

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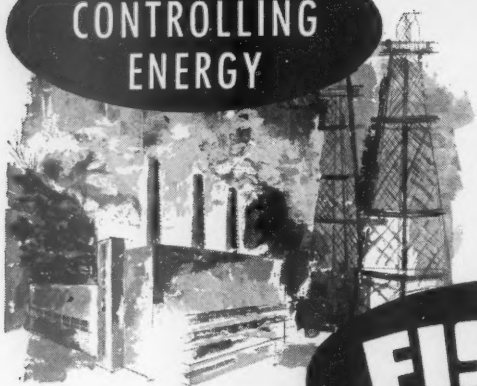
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INSURANCE COMPANY OF NEWARK, NEW JERSEY • SINCE 1845

Wall St. Talks...

... about margin requirements, call loans to brokers, Sanborn Co., Johns-Manville in shell homes.

Federal Reserve officials are watching the steady climb in stock market credit closely but, according to most observers, an increase in margin requirements isn't likely—"just yet." Margins, now 70%, were reduced from 90% last July. Since that time, credit in the stock market climbed by more than \$300-million.

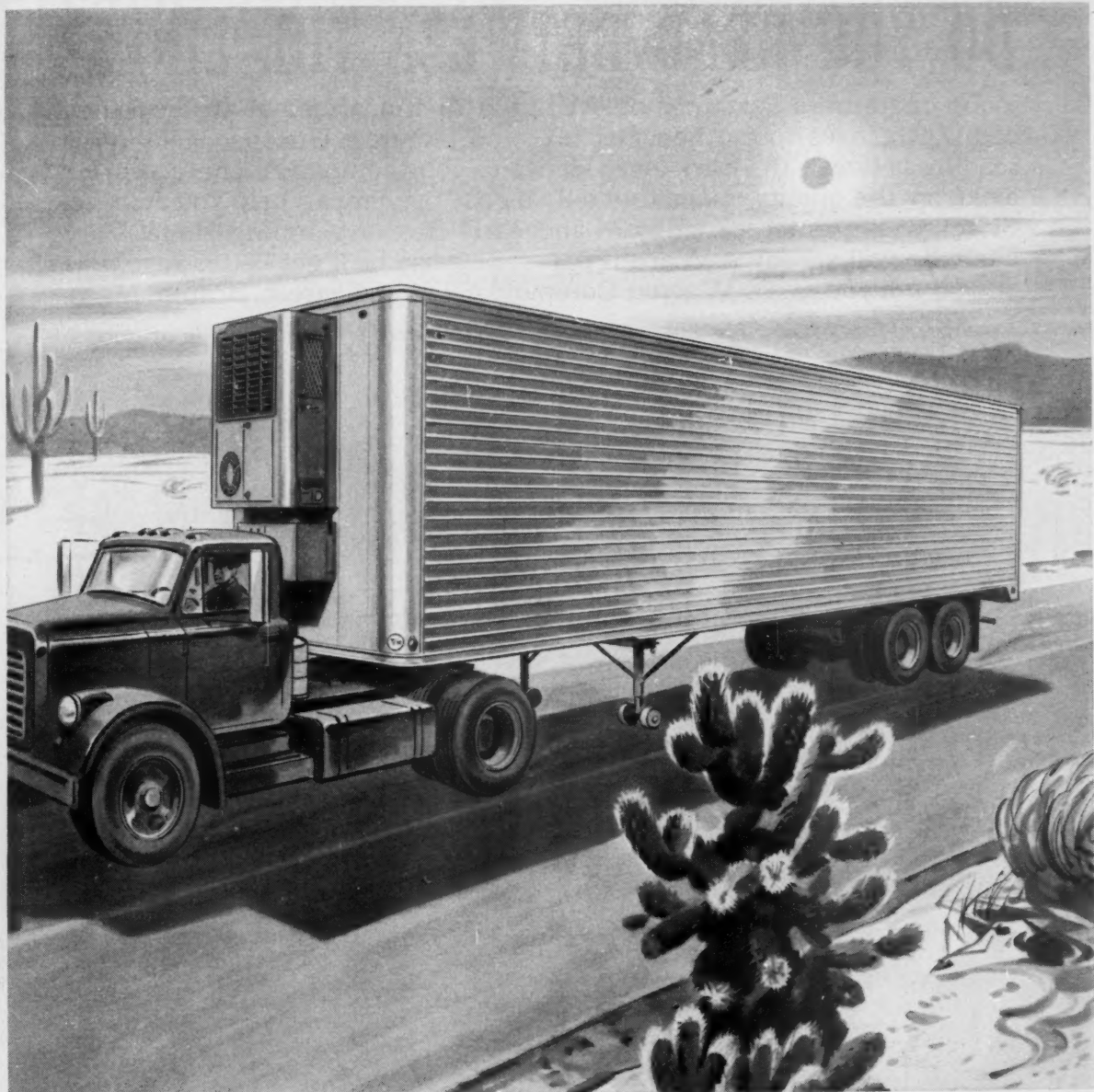
New York City banks are quietly "holding the line" on the rate that they charge on call loans to stockbrokers at 4½%, despite the fact that some out-of-town banks are offering brokers credit as low as 3½%. One New York banker explains: "We're still comfortably full with business loans; we just don't have the incentive to go after this kind of business." Brokers, meanwhile, are playing the field, and are gradually moving borrowings into the low-cost banks.

Sanborn Co., a Waltham (Mass.) producer of medical electronic instruments (\$55 over the counter), is considering 15 or 20 different merger proposals from larger electronics companies including, among others, Hewlett-Packard Co. Sanborn says that no decision as yet has been reached on selling out, but that the matter is "sure to come up" at next week's director's meeting.

Technical Operations, Inc., which does R&D work in film and radiographic equipment, is continuing its wild gyrations. The stock, which is traded on the American Stock Exchange, moved from the mid-30s to 80 over the past few months. This week it fell to 67, then bounced to 74. The company has only 474,000 shares outstanding. Western Union and American Broadcasting-Paramount, moreover, each own 21% of the shares, and management holds another 11%. That means the floating supply consists of less than 250,000. Management says it has no intention of splitting the stock, says its volume and earnings are ahead of last year's 26¢ a share earning.

Talk that Johns-Manville is about to join the growing number of companies in the shell home field sent its stock up almost 4 points to 69. A company spokesman admits that the building supplier is "interested" and is making a study of the possibilities in the shell home field, but insists no decision has yet been reached.

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TR-896

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The refrigerated van shown here will normally carry about 3,000 frozen turkeys—and it's important that it *deliver* 3,000 frozen turkeys—not 2,000 with another 1,000 in varying degrees of thaw. That's why Trailmobile subjects its refrigerator designs to tests which duplicate the most oppressive hot weather conditions. These tests—conducted by an independent agency—subject the trailers to a withering 100 degree heat with 50% relative humidity. And then to match road conditions this

hot, moisture laden air is blown at the trailer at 50 MPH.

With the knowledge gained in these tests, Trailmobile has found better ways to seal joints . . . to prevent condensation in insulation . . . to avoid heat conducting metal-to-metal contact . . . to provide for unrestricted air circulation . . . to avoid troublesome hot spots that mean loss of frozen cargo. And the result is a more reliable refrigerated trailer—and another Trailmobile contribution to highway transportation progress.

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In the Markets

• • •

Market Boils With Less Steam

As Investors Get More Particular

The boiling activity that has characterized the stock market since the beginning of the year subsided somewhat this week. Some stocks had big moves, but most issues traded within a narrow range, and the Dow-Jones average showed little change. Investors were still bullish, but seemed to be waiting for stronger signs of an improvement in business before increasing their commitments. There may be some softness in prices until a rise materializes, but the long-range prospect is still for higher prices.

Investors are shifting from group to group, which accounts for a great deal of churning. The aircrafts got some play after the Administration announced that it was increasing its jet carrier program; Lockheed, which was awarded a \$1-billion contract, was strongest. And there was a move into airlines after Delta and National received new route awards.

Most of the demand is still for the glamor "growth" groups. But some of the cyclical issues—machinery, construction, metals—are beginning to attract attention, on grounds of either high yield or the prospect of improved earnings. But no rush into cyclical industrials—or railroads—has developed as yet, which indicates that investors are not wholly convinced of a strong upturn.

• • •

Treasury's Advance Refunding Offer Takes Bond Market by Surprise

The new debt management team at the Treasury—C. Douglas Dillon and Robert V. Roosa—took the bond market by surprise this week with an \$8-billion advance refunding offer.

They offered holders of a whole series of outstanding 2½%, 2¾%, and 2⅝% bonds and notes—totaling \$19.5-billion altogether—the chance to swap their holdings for a new 3⅝% bond due in 1967 and a 3¾% bond due in 1966. Swaps up to \$8-billion will be accepted, but Roosa said that the total swapped probably would be "nowhere near" \$8-billion.

The bond market has long suspected that some sort of advance refunding was on the way—but there was no warning that it would come this week. To prevent rumors from getting started, the Treasury deliberately avoided sounding out dealers in advance on the state of the market. The fact that Dillon and Roosa are trying an advance refunding so soon after they took office indicates that they intend to use this device often for debt lengthening.

The key to the success of the issue will be the reaction from commercial banks, which are the big holders of the issues being refunded. According to Tilford C. Gaines of the First National Bank of Chicago, the

investment yield on the new bonds for holders of the outstanding issues will run about 4%; and in today's market, Gaines thinks this is quite attractive.

In another refunding deal, American Telephone & Telegraph Co. announced plans to redeem its \$250-million issue of 5½% bonds of 1986, which were originally sold only 17 months ago. To do this, AT&T will have to pay bondholders \$1,077.50 for each \$1,000 bond. AT&T figures that it will break even on the deal if it can sell new bonds at a rate of 4.9% and that anything less than that will be "money in the bank."

• • •

Mesabi Iron Common Rises \$10 a Share On Heels of Favorable IRS Ruling

Mesabi Iron Co. common rose \$10 per share this week to \$110—double its price of six months ago—on the heels of an Internal Revenue Service ruling that two trusts to which Mesabi plans to transfer its assets will not be taxed as corporations. This means that only certificate holders in the trusts will be required to pay federal taxes on the royalty income the trusts will receive from Reserve Mining Co., which leases Mesabi's iron-ore properties in Minnesota.

Mesabi's royalty deal with Reserve—based on tonnage produced—was worked up after a lengthy litigation over accounting methods used by Reserve in calculating profits. Reserve paid \$4.4-million in royalties to Mesabi last year under the new contract.

Mesabi plans to liquidate all its assets but still needs a few more favorable rulings before it can do so.

• • •

Alleghany Contenders Gird for Battle In Wake of Peace Talk Failure

With peace talks ended, the Murchison brothers of Dallas—John and Clint, Jr.—and Allan P. Kirby squared off this week in what looms as a fight to the finish for control of Alleghany Corp.

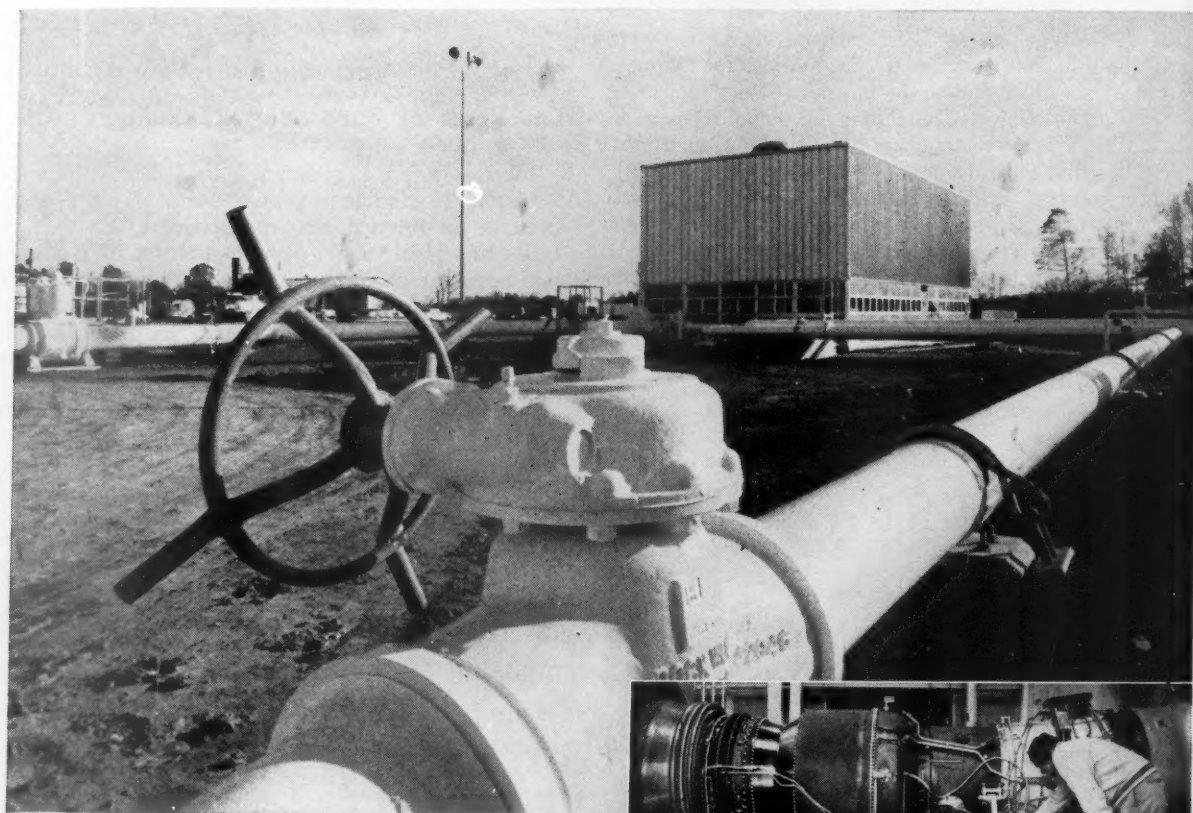
At midweek, Kirby personally had holdings of 824,800 shares of common; 278,940 warrants—to purchase the common at \$3.75 a share; and 129,590 shares of 6% preferred, each share convertible into 4.7 shares of common with payment of \$3.57 a share.

Kirby put roughly \$5-million into Alleghany stock on one day alone last week, after the truce with the Murchisons was called off. His group now holds a bit more than 25% of the votes that will be cast May 1, provided all warrants and preferred shares are converted.

The Murchison interests say they have a bit more than Kirby's forces, and are getting help from outside sources, including A. M. Sonnabend, Boston financier who threatened a proxy fight last year.

The proxy fight is sure to get rougher from here on in. The record date to qualify for voting is Apr. 14, and about 50% of the stock still isn't committed. At midweek, Alleghany common sold at 13 (1960-61 range: 8½-14½).

In this building... a new "first"



...in Columbia Gas System's constant search for progress

A number of "firsts" in the business of delivering natural gas have been recorded by companies of the Columbia Gas System. Here is another—one of the highlights of 1960 operations.

On November 15, 1960, the 10,500-horsepower thrust of an aircraft jet engine was harnessed to help pump 666 million cu. ft. of natural gas a day to help serve 15 million people*.

This is the first time an aircraft jet engine has been used as a source of stationary power. In cooperation with Pratt & Whitney and Cooper-Bessemer, it was installed in this compressor station near Clementsville, Ky., on the lines of Columbia Gulf Transmission Company, a System subsidiary. With nine other Columbia Gulf compressor stations, it moves gas from the Louisiana Gulf Coast to other Columbia System companies which, in 1960 delivered a total of 792 billion cubic feet of gas to homes, industry and other public utilities.

IN 1960, THE SYSTEM ALSO... equipped more compressor and field pumping stations with automatic controls... built an entire distribution system for an Ohio village with plastic pipe... began operation of the first leg of a microwave communications system... instituted new refinements

in machine accounting and centralized billing procedures. These and many more innovations were completed or initiated in 1960 in Columbia Gas System's constant search for new, better and more economical ways to serve customers. For the full story of the System's progress, write for the Annual Report for 1960.

*The estimated 1960 population of the area served by Columbia System companies in Ohio, Pennsylvania, New York, Virginia, West Virginia, Maryland, Kentucky and the District of Columbia.

THE COLUMBIA *Gas* SYSTEM, INC.



Columbia Gas System Service Corporation, Columbia Hydrocarbon Corporation, 120 East 41st Street, New York 17, N. Y. **CHARLESTON GROUP:** United Fuel Gas Company, Amere Gas Utilities Company, Atlantic Seaboard Corporation, Columbia Gas of Kentucky, Inc., Virginia Gas Distribution Corporation, Kentucky Gas Transmission Corporation. **COLUMBUS GROUP:** The Ohio Fuel Gas Company, The Ohio Valley Gas Company. **PITTSBURGH GROUP:** The Manufacturers Light and Heat Company, Columbia Gas of New York, Inc., Columbia Gas of Maryland, Inc., Cumberland and Allegheny Gas Company, Home Gas Company / Columbia Gulf Transmission Company / The Preston Oil Company.

LABOR

Union Steps Up Fight Against 'Boulwarism'

Labor has shifted its fight against the "Boulwarism" of General Electric Co. from the bargaining table to the National Labor Relations Board and court proceedings. It hopes to upset by legal maneuvers the tough GE negotiating policy that has withstood repeated union assaults at contract time.

More than that, labor hopes to put new stumbling blocks—legal orders and an adverse public opinion—in the way of the spread of what it calls GE's take-it-or-leave-it bargaining policy.

The result may be a historic NLRB and court showdown on negotiating responsibilities.

• **Frustration**—The campaign against GE, spearheaded by the International Union of Electrical Workers, started in labor's frustration after IUE's strike against the company collapsed last October (BW-Oct. 29 '60, p. 82). IUE gained nothing that it couldn't have had without striking for more than two weeks.

At the time, IUE's Pres. James B. Carey boasted that neither GE nor any other employer "can take solace . . . GE's 'Boulwarism' failed either to paralyze the union or to hypnotize the union's members into automatic acceptance of inadequate proposals."

Privately, Carey and other leaders of labor—including AFL-CIO Pres. George Meany and Walter Reuther, president of the United Auto Workers—admitted a serious concern over what they considered the most effective use yet of GE's "Boulwarism" in bargaining.

• **Hard Lines**—"Boulwarism" is GE's basic hard-bargaining policy first carried out by Lemuel R. Boulware, now retired as a GE vice-president, and invoked in 1960 by Philip D. Moore, GE manager of employee relations service. Its foundation is a "fair" offer by GE and a refusal to go beyond that offer—whatever the consequences—unless new economic facts are developed to demonstrate that changes are necessary.

Labor challenges this as a form of "bargaining by ultimatum . . . a denial of the very essence of bargaining, which implies the process of give-and-take, conciliation, and compromise of opposing viewpoints."

GE argues with equal vigor that it does change its position, where justified, in the course of bargaining; revisions can be found even in the 1960 agreement, it contends.

• **NLRB Action**—Defeated in bargaining, IUE turned to NLRB—expected

by labor to take a friendlier, more sympathetic attitude toward unions in the Kennedy Administration. IUE complained in unfair labor practice charges:

• GE submitted an offer on Aug. 30 last year, fully intending to "stand firm and adhere to that offer throughout the negotiations," and conditioned the negotiation of a new contract on union acceptance of the Aug. 30 offer.

• It appealed to employees to accept the offer "in derogation of the bargaining status of the union . . . in order to undermine the union," and in some plant locations "tried to bargain directly with employees," offering them "terms more favorable than those offered to [IUE] up to that point."

• And, among other practices cited, GE "engaged in personal attacks on the leadership of the union, questioning the ability and motives of the leaders."

Late last month, NLRB's regional director in New York City issued a formal complaint against GE. Hearings this week were reset for mid-April.

The NLRB regional office also issued complaints against a number of IUE locals, based on GE charges of strike and picket line violence. And GE pressed a complaint that IUE inspired the illegal violence.

• **Long Fight Ahead**—The charges and countercharges can be expected to lead to a long, rough fight. If the almost certain course of decisions and appeals is followed on the normal timetable, court action may still be pending when GE and IUE bargain again in 1963.

To labor, the principal issue involved is GE's right to make a single offer and to refuse to budge from it.

To GE, a more critical issue is the challenge of an employer's right to go directly to employees with an appeal for support of a company offer.

In theory, at least, the future of "Boulwarism" as a bargaining policy is at stake. IUE hailed the NLRB complaint as the "beginning of the end of 'Boulwarism,'" a policy that the union said "has started to become attractive to employers in other industries." AFL-CIO issued a similar statement.

It's doubtful, though, that GE's hard-bargaining policy will be changed drastically, win or lose in NLRB and court actions. Practices may be altered but objectives will be the same—and



LEMUEL R. BOULWARE, GE vice-president, now retired, set the labor policy.



PHILIP D. MOORE, GE negotiator, relied on it successfully last summer.



JAMES CAREY, electrical union chief, is appealing to courts and public opinion.

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will be sought through new tactics if old ones are ruled illegal.

• **Broader Intent**—Undoubtedly, labor strategists are as aware of this as anyone. They do not in any way underestimate GE. So broader reasons must be found for moves against GE.

A big one, of course, is that any rulings against GE will deter other employers who may be considering adoption of GE's bargaining policy and practices to the extent that their particular union situation will allow it.

GE's position is unique; it deals with a proliferation of weakly entrenched unions, not a single strong one. Many employers say "Boulwarism" succeeds at GE because of this. But, beyond doubt, its consistent negotiating successes have influenced other employers to be tough.

However, labor's NLRB actions against GE must be recognized as a part of a broad program planned, as one union official put it, to "cut GE down to size, as far as public opinion and influence is concerned."

• **Anti-GE Caravan**—This program started early last December, when IUE announced that a "caravan" would be sent around the country to bring before the public IUE exhibits that accuse GE of turning back the clock on social-welfare programs, of "blackmailing" communities, of being "inhuman" in closing and moving plants, and so on.

The campaign has been furthered by a propaganda barrage based on the recent antitrust cases, with a theme sug-

gesting that "the same uncontrollable greed" was behind price-fixing and contract-rigging as behind GE's action "to force a strike on the IUE in the hope that the international union could be crushed." Carey plans to carry this theme to the GE stockholders' meeting in Syracuse Apr. 26.

It is also being carried out through "Don't Buy GE Products" campaigning in Oakland, Calif., and perhaps elsewhere, and in quiet efforts under way in Washington for a full-fledged Congressional inquiry into GE.

To company spokesmen, this amounts to "a job ruination campaign . . . a relentless attack on the company's reputation . . . which can be easily recognized as a continuation of Carey's long-term vendetta against GE."

• **Bid for Prestige**—It's hard to see the union objective, beyond the very real desire to weaken GE as a bargaining pattern-setter for other employers. But one objective may be Carey's desire to regain stature lost in the contract setback last year.

The strike that collapsed was a personal setback for Carey, who gambled and lost. It left serious cracks in the union, and eroded Carey's once-firm position until, today, his future in IUE is in question.

IUE's still-fiercely president has been mending fences quietly for the past few months. Now his concentration in attacks on GE can be interpreted as a vigorous new effort to assert dynamic leadership over the union.

Impact of Automation Is Next Issue

United Rubber Workers wants employers to establish funds and make other provisions to aid displaced workers.

The United Rubber Workers will ask employers to establish automation funds—similar to those in meatpacking and West Coast longshoring industries—when contract bargaining gets under way next week. The union says it is seriously concerned over the impact of technological developments on jobs.

URW's worries reflect its gloomy report in January to Rep. Elmer J. Holland (D-Pa.), chairman of a House subcommittee studying—on a preliminary basis—the effects of automation on employment. The Rubber Workers told Holland that tire and tube plants cut employment by 30% (31,000 jobs) and working time by 29% between 1947 and the end of 1958, but produced the same number of tires and tubes.

• **Help Sought**—Rubber Workers officers and a special union automation study committee say management must help—substantially—with the problems of displacements.

Contract talks between URW and

Goodyear Tire & Rubber Co. and Firestone Tire & Rubber Co. open Mar. 20. Union negotiators will demand:

• An employer-financed automation fund to help workers displaced by technological developments; one established in contracts of Armour & Co. and its unions has received particular attention (BW-Jul.16'60,p58).

- A shorter work week.
- Transfer rights for workers.
- And earlier pensions with "an adequate level of income."

Wages will not be involved in the bargaining this spring.

• **Other Unions**—Unions in other industries can be expected to place similar emphasis on automation problems in contract talks this year.

The United Auto Workers, for one, is certain to make technological unemployment the critical issue in negotiations opening in July. Many in auto management look for "make work" demands from UAW. **END**



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In Labor

• • •

Reuther and Carey Reveal Impatience With Slow Progress of AFL-CIO

Impatience of former CIO leaders with the slow-moving machinery of AFL-CIO came out into the open during an Industrial Union Dept. legislative conference in Washington last week. The IUD's top officers—Walter P. Reuther and James B. Carey—made clear they are “disenchanted” about AFL-CIO progress.

This is no new feeling. However, it has seldom been talked about so bluntly.

The flare-up last week followed a failure of AFL-CIO Pres. George Meany to keep a date with the IUD conferees. It was interpreted as a snub, and pent-up feelings burst out. Reuther indirectly and Carey in angry and direct terms criticized the Meany leadership.

Some of their attack points: (1) Meany seems undecided whether it's “an investment firm we're running or a trade union,” a reference to Meany's plans for housing investments (BW—Mar. 4'61, p93); (2) he is letting Building Trades raids against industrial unions go on without doing anything about them; (3) he's “not pushing hard enough, anywhere”; and (4) he is “snubbing” Rep. Adam Clayton Powell, chairman of the House Committee on Education & Labor, and failing to cooperate with him in the best interests of labor.

Surface calm may be restored but the revealed tension will be a continuing serious problem.

• • •

AFL-CIO Phone Union Breaks 24-Year Sway of Independent

Independent unionism received a jarring blow—and AFL-CIO got a lift—when the Communications Workers of America defeated the independent United Telephone Organization last week in a representation election among 18,000 New York Telephone Co. employees. UTO had bargained for the metropolitan area installation and maintenance employees for 24 years.

The telephone and oil industries are strongholds of independent unionism. The New York vote aroused speculation that workers, pinched by recession, may be getting dissatisfied with what they regard as the lesser bargaining power of unaffiliated unions.

• • •

Air Line Stewardesses to Become Division of TWU; Court Fight Seen

The Air Line Stewards & Stewardesses Assn. has found a haven within Michael J. Quill's Transport Workers Union, but its troubles are far from over. The Air Line Pilots Assn. claims the ALSSA, which was set up originally as part of the ALPA. In addition, the

TWU defied AFL-CIO bans by taking in the ALSSA. A fight in courts and AFL-CIO can be expected.

Set up in 1948, the ALSSA has been trying to break away from the Air Line Pilots since 1957. Recently, ALSSA stewardesses “lobbied” at AFL-CIO's executive council meeting for a separate charter. They couldn't shake Pres. George Meany's conviction that all airline crafts should be in a single union, not split up.

With funds and dues income tied up by ALPA suits, the ALSSA said that it was in the market for a place in another union. The Teamsters put in a bid, but Quill's offer of an autonomous division won.

• • •

Industrial Union Dept. Directs Joint Organizing Drive in South

AFL-CIO industrial unions have opened a joint organizing campaign in the Deep South—hoping that a friendlier National Labor Relations Board will help make it successful.

The Industrial Union Dept. recently opened offices in the Spartanburg-Greenville (S.C.) area. Nobody in the new Project Dixie wants to talk about it—they're afraid publicity will mean more employer opposition. But IUD admits “a number of unions” will join efforts, with the Textile Workers Union of America in the fore.

The drive is not intended to be another Operation Dixie—labor's big and futile effort of the 1940s. It's actually a redirection of a joint drive started in Philadelphia about a year ago (BW—Jul. 30'60, p45), to “mop up” unorganized plants there. The Philadelphia drive hasn't been going too well in recent months, so IUD leaders decided to tackle the South.

Two important developments involving the NLRB are behind that decision:

- Rep. Adam Clayton Powell, chairman of the House Committee on Education & Labor, is about to probe TWUA charges that NLRB has allowed unfair labor practices to stifle organizing in the South.

- Unions expect more sympathetic treatment from NLRB with Kennedy-appointee Frank W. McCulloch as chairman and another Kennedy appointee, Gerald A. Brown, named to succeed Joseph A. Jenkins.

• • •

Its Own Organizers Charge ILGWU Uses Unfair Labor Practices

The International Ladies' Garment Workers' Union, which has refused to recognize a union of its organizers and business agents on the ground that they are not employees but “missionaries,” was accused last week of spying on the missionaries' meetings, grilling them regarding union membership, and transferring or firing active members.

The accusations—with their echoes of 1930 labor relations—were part of unfair labor practice charges filed with the National Labor Relations Board.

NLRB is currently studying an ILGWU organizers' petition for a collective bargaining election (BW—Jan. 14'61, p99).

PERSONAL BUSINESS

BUSINESS WEEK

MAR. 18, 1961

A BUSINESS WEEK

SERVICE

Look for interest rates on conventional home mortgages, already loosening up a bit, to soften even more in the next few months. More money, too, is becoming available for mortgages.

A spot check of lending institutions coast-to-coast shows that the past year's familiar 6% rate (or more) is giving way steadily to 5¾%. Some bankers see another drop of ¼% on the way.

Say you're in the market now for a \$50,000-\$75,000 home—either new or old. You might, for example, pay 6% for a \$35,000 loan on a \$50,000 house, but only 5¾% for the same loan if the house is worth \$60,000.

When you start looking for a mortgage loan, you'll find that most banks limit loans to \$30,000 to \$40,000 for homes in the \$50,000-\$75,000 price range. Some savings and loan associations, though, may go as high as \$50,000 when both buyer and property are well rated.

For mortgages on \$75,000-plus properties, your credit position takes on greater importance. In some cases, sizable stock holdings, cash life insurance policies, or other collateral may get you a loan perhaps as high as the property's total value.

Note: When inquiring about a mortgage, be sure to check on making payments before they are due without added charge.

Demand for new or existing homes has not been great the past few months. But realtors polled by Previews, Inc.—real estate clearing house handling high-priced properties—now report an upturn in activity. If you're buying in the \$50,000-\$75,000 range, you might find it advantageous to wait until midsummer, or even until after the first of the year, when sales traditionally are slow. But bear in mind: There is no "season" for the sale of large estates and gentleman's farms, over \$100,000.

Older homes, well constructed, in good locations—offering more space for your investment than new houses—are becoming harder to find. Brokers predict an even greater demand for existing houses selling over \$50,000.

Here are some local pointers: **Boston**—Modern houses (\$50,000-\$100,000) sell better than older property; location is the decisive price factor. **New York**—Reasonably priced houses should sell within two to three months; split-level and ranch styles are waning in popularity. **Chicago**—Nothing good goes begging in top established areas; good turnover in \$60,000-\$70,000 old homes. **Atlanta**—New \$50,000-\$60,000 houses doing well; older homes, with large acreage, are slow-moving. **Dallas**—Prices firm with the number of prospects lessening; old homes being bought for land in posh Highland Park section. **San Francisco**—Bulk of activity in \$50,000-plus bracket is in existing homes; space and mature landscaping are chief advantages.

What about renovating if you're planning to sell? While structural defects should be corrected, all you really need to do is spruce up your place before putting your house on the market. Buyers want to renovate, and you can't anticipate their individual ideas.

Summer-in-Europe: Expect crowded ships, planes, and hotels this season—despite the current recession. The rush abroad will about equal last summer's, when approximately 500,000 Americans went to Britain and the Continent, say travel specialists.

Tips that may affect your planning:

- Better-than-average accommodations are available now, with a heavy

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

MAR. 18, 1961

late-rush due in three to six weeks. Tourists have been booking one to two months later than normal, partly because there are no special attractions such as the Olympics or Brussels Fair. Thomas Cook & Son reports that de luxe escorted tours got a late start, but now are filling up fast.

- There will be more airliner seats available than ever before (50,000 weekly this summer). But for fast booking, don't insist on higher-priced space—over 80% of all seating is economy class.

- AAA reports that 300,000 Americans will drive cars in Europe this season (rental and rental-purchase), as against 250,000 last year. Arrange your auto deal now—don't put it off until the last week, which is what a lot of disappointed people did last year. The big five in the field are AAA, Auto Europe, Autourist, Avis, and Hertz. All handle most makes of cars for all countries. A free booklet, *European Car Hire and Purchase 1961*, can be obtained from AAA, International, 250 Park Ave., New York 17.

- Big cities, as usual, will draw the largest crowds of Americans, predicts American Express Co. London and Paris each will have 500,000, Rome 400,000, Madrid 276,000, Brussels 152,000. If you want to escape the tourist jam, there'll be some relatively uncrowded centers of interest—for instance, Istanbul 100,000, Athens 75,000, Lisbon 64,000, Berlin 34,000.

- Several new first-class and de luxe hotels are opening this spring: the Amalia on the Bay of Athens, Mt. Parnes Hotel Xenia near Athens, Miramare Gauer on the island of Rhodes, Sace in Madrid, Carhuela Palace on the beachfront in Torremolinos, Fenix in Lisbon, Forum in Rome, the Select and the Carlton Senato in Milan, Alaska in Cortina D'Ampezzo.

—•—

Drama desk: Five new Off-Broadway hits add quality to New York's theatrical season. *Double Entry*, two short musicals by Jay Thompson, has lively comedy (Martinique Theater, Broadway & 32nd). Another twin bill—*An American Dream* and *The Death of Bessie Smith*—is by young playwright Edward Albee, who is "angry" but also entertaining (York, 64th St.).

Other top productions—*Call Me By My Rightful Name*, a comedy-drama with a racial theme (One Sheridan Sq. Theater); a revival of Ibsen's *Hedda Gabler*, starring Anne Meacham (4th St. Theater); and *Roots*, comedy-drama voted best play of 1959-60 by London critics (Mayfair, 235 W. 46th St.).

Brendan Behan, whose wild, eccentric comedy *The Hostage* shook up the Broadway critics early this season, will be back again, starting Apr. 1. He'll be emcee of a jazz review, *Impulse* (Royale, 242 W. 45). Line-up includes Gerry Mulligan, Nina Simone, Art Blakey. For heavier fare, you might want to see again Moscow's *Moiseyev Dance Co.*, opening at the Metropolitan Opera House Apr. 18—the show goes on the road, too, with stops in Washington, Philadelphia, Boston, Montreal, Toronto, Cleveland, Detroit, Chicago, Minneapolis, San Francisco, Los Angeles.

—•—

Both teenage and adult readers in your family might get considerable fun and education from *The Fifteen Wonders of the World*, by Rene Poirier (Random House, \$5.95); 384-page volume, illustrated, details major construction projects in history from the Great Wall of China to the Oak Ridge Atomic Power Project . . . *The Heroic Age of American Invention*, by L. S. De Camp, has a lot of human interest, for younger readers (Doubleday, \$4.50).

And there's a fine picture book called *Ponies*, by Ursula Bruus, with text for any age, and photos to delight small fry (Van Nostrand, \$6.75).

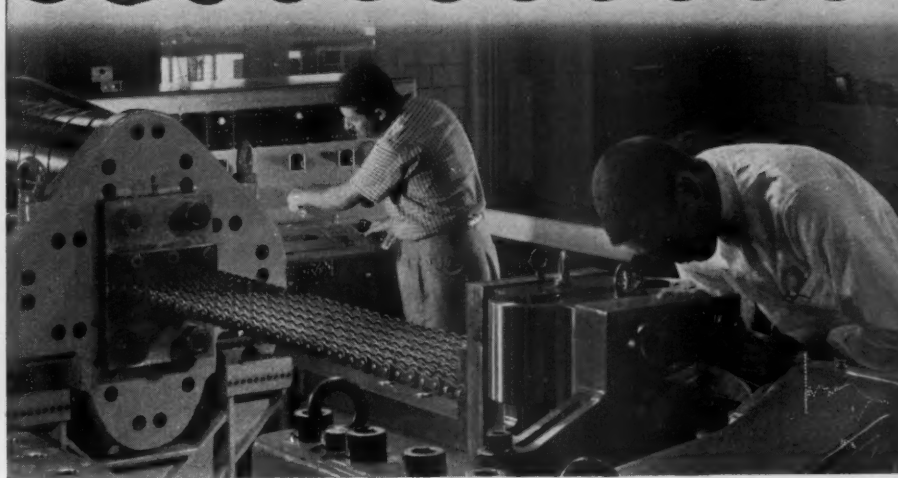
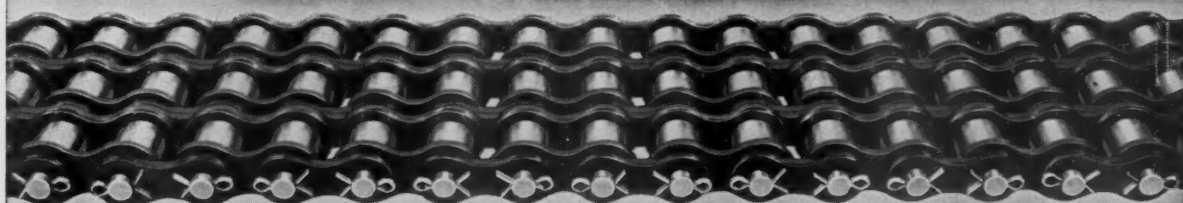
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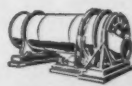
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Modernizing Fever Hits Typewriter Plants

Veteran industry is busily making over production methods as remedy for manifold troubles besetting it as result of shifting markets and foreign competition.

Typewriters like the one in the picture—stripped down to some of its 3,800 parts—are a real classic in engineering. The basic design hasn't changed in 50 years. Up to the last year or so, you could say the same for the venerable old industry that made them.

The names prominent now are still the same ones that first made typewriters an office byword: Smith, Royal, Remington, and Underwood. The only difference is that, through merger and acquisition, it's now Smith-Corona Marchant, Inc., Royal McBee Corp., Remington Rand Div. of Sperry Rand Corp., and Underwood Corp., which became part of Italy's Olivetti & Co. two years ago.

But suddenly, the whole character of the business is shifting, and this staid old industry is suddenly awl in more change—and more problems—than it has seen in the last 100 years.

- **Top to Bottom**—Faced with rising imports, shifting markets, and hotter competition at home, the industry is revamping its old, red brick factories—most of them dating from the early 1900s—from top to bottom. Before this, the industry had a reasonably vigorous equipment replacement program and truly modern tools to work with. But production was just not efficient enough to compete.

Now it is shuffling departments around, consolidating production lines, putting conveyors between manufacturing and assembly lines, in moves that might not seem novel in some industries but appear rather spectacular to the typewriter makers. It is also making more of its own parts, and to closer tolerances, in order to cut assembly time, reduce adjustments needed in assembly.

On the product side, the industry is flooding the market with ever more and ever fancier models. In the last year, the Big Four brought out six new portables, two new standards, six new electrics, and two special typewriters for use in automatic data processing.

- **Electric Spark**—Some of the change

has been a long time in the making. It actually started in 1934, when International Business Machines Corp. brought out its first "electromatic" typewriter. An independent, James L. Smathers, had offered it to Underwood and Royal; both turned it down because the market just wasn't there. Royal and Remington had electrics as early as 1925, but abandoned them within three or four years. Burroughs Corp. tried to cash in on electrics, too, as well as manuals. It jumped into the market in 1935, but got out the next year.

IBM nursed its line along through the war, and was ready when the big postwar market suddenly opened up. The other four later redeveloped electrics, but IBM had a headstart. Of the \$280-million spent yearly on typewriters, almost \$100-million goes for electrics, and IBM probably has over 65% of this business. Its machines are produced in a sumptuous, highly mechanized plant it built four years ago in Lexington, Ky.

- **New Troubles**—The new flurry of change, however, results from the new troubles that are besetting the Big Four:

- Foreign competition is severe. Imports—mostly portables, with some manual "standards"—are up from 15% of U.S. sales in 1956 to 35% last year. Not many electrics come in yet, but they will—and probably soon.

- The market for the industry's old bread-and-butter item, the manual standard typewriter, is coming apart. In the last 10 years, manual standard sales in the U.S. have dropped 40%. Most of this market has just shifted over to electrics—but IBM has gobbled up over half of it.

- Competition among the Big Four, long at fever pitch, is more cut-throat than ever. Smith-Corona and Royal have accused Underwood of offering manual standards, on bids, at prices actually "well below" cost. Last year, Royal slashed the nationally advertised prices on its cheapest portable from \$79.95 to \$49.95. Remington followed suit.



- With shifting markets and foreign competition, the industry is saddled with idle capacity. This month, Royal laid off 600 workers at its main Hartford, Conn., plant. Underwood, on a two-shift basis, is operating at 60% of capacity; Remington is "below average capacity." Only Smith-Corona, which is making deep penetrations in the market for electrics, is going along at full steam. Smith-Corona has the only electric portable on the market, plus a "compact" and standard electric, and is probably the biggest threat to IBM.

- The new, fancier models put out to lure buyers are costlier to build.



HUGE NUMBER OF PARTS on a typewriter (this electric has 3,800) make labor the biggest expense in manufacturing and a

spur to modernizing of production methods. In background is assembly line at Royal McBee Corp.'s Hartford, Conn., plant.

"It's like the vacuum cleaner business," says Raymond Spilman, a New York design engineer who has worked with major typewriter companies. "It's not what the machine will do, but all the attachments you get with it." It costs up to \$5-million just to tool up for a new model, and up to \$2-million for model refinements.

• **Shifts and Shake-Ups**—All these developments will undoubtedly bring a shake-out among the major four—but it's hard to tell which will move up or down. Right now, it's a tossup which is the biggest. Unit sales are kept secret, and volume figures are hidden in over-all corporate figures. Both Royal

and Remington claim to be the biggest domestically and worldwide. In terms of U.S. production, Smith-Corona and Underwood are close on their heels. Each of the four has about 3,000 employees.

Together, the four turn out all the portables made in the U.S. and 95% of the non-portable "manuals." Besides IBM, the only other in the field is R. C. Allen Business Machines, Inc., which does a small business in manuals.

To face their mounting troubles, the four have turned to new leadership, mostly coming up through the ranks. Royal, Remington, and Smith-Corona all picked up new presidents last year.

Underwood acquired its current president only two years ago.

With new faces in the front seat, the industry is throwing off the inertia to which most of the delay in revamping of production methods can be laid. All of the Big Four came out of World War II with old reputations, old products, and old managements. Production of manual typewriters had all but shut down during the war, so there was a soft cushion of back orders to rest on. Now the changes are coming all up and down the line—even to the way screws are put in.

• **Long History**—Past inertia is more understandable if you consider that the

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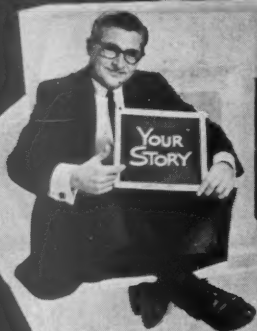
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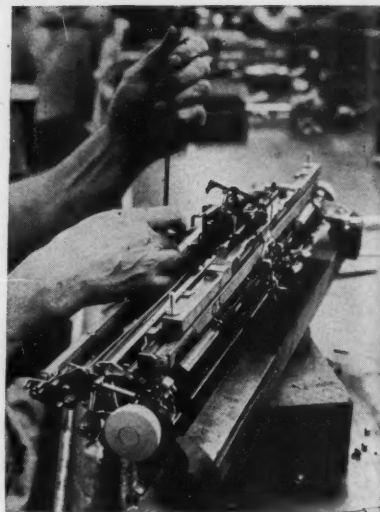
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HANDWORK has big part in typewriter making; worker tightens carriage screws.

typewriter concept has actually been around for almost 250 years. It was England's Queen Anne, in 1714, who granted the first patent for an "Artificial Machine for Transcribing Letters as in Writing so Neat and Exact as not to be Distinguished from Print."

Christopher Sholes came up with the first practical typewriter about 1870—one that looked a good deal like today's machine. By the early 1900s, all of today's Big Four had got their start.

Since those early days, most design changes have been little more than refinements—but uses have expanded until today there are typewriters for everything from Greek to Chinese. In the Roman alphabet alone, typewriters come with over 100 type styles. And Smith-Corona this year even introduced a combination "typewriter-computer" selling for \$6,000 to \$9,000 (BW—Feb. 25 '61, p. 80).

• **Complex**—Because today's typewriters are more complex, they're considerably more expensive to build. The typewriter maker works with an incredible variety of parts, processes, and materials. A portable has 1,800 parts, an electric machine 3,800.

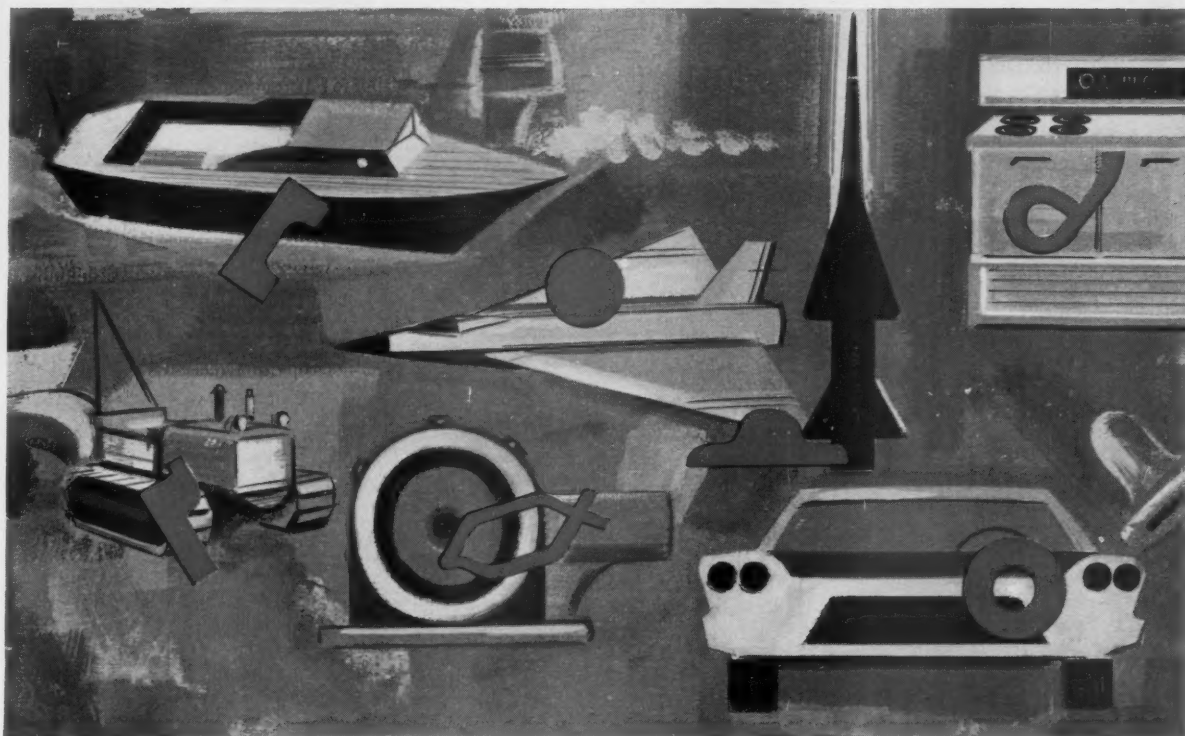
These range from tiny screws and springs to the bulky, die-cast frame and side panels. Parts may be cast, molded, machined, or punched out. Metal parts often go on to be plated, heat-treated, tumbled, polished, and—if not plated—electrostatically painted.

Basic materials range from aluminum, steel, and iron to plastic and rubber. Remington even cold-roll finishes its own bar steel, has a rubber processing plant.

To stay in a narrow budget and get the needed fine tolerances, the four now make 85% to 90% of their parts.

• **Costly Assembly**—So many parts make for costly assembly. There is

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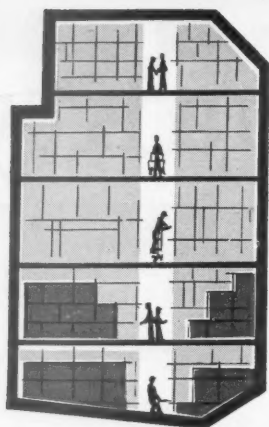
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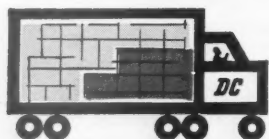
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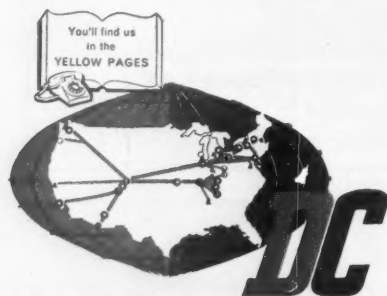
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almost no automatic assembly, so labor runs over 60% of manufacturing cost. For parts fabrication, assembly, and labor, a single portable takes about seven or eight hours to build; an electric requires 25 hours.

The difference in labor costs is where foreign producers trump the U.S. The industry's hourly wage average in the U.S. is just over \$2—well below the average for the U.S. metalworking trades, but three times the hourly wages paid in West Germany, the main exporter. The redeeming factor is the steep level of fringe benefits overseas. All things considered, says Royal Pres. Fortune P. Ryan, foreign production costs run two-thirds to three-quarters of those in the U.S.—a clear advantage.

- **Overseas Move?**—Why not just move overseas, then? Royal, Remington, and Smith-Corona already do some manufacturing abroad for export to the U.S.—mostly of portables, to compete with West Germany's Olympia and Italy's Olivetti, both of which have modern, lavishly mechanized plants built after the war.

Up to a few weeks ago, Remington planned to move its entire production of non-electric standards to Europe, then decided against it. Royal played with the idea, too. "In the long run, our costs would definitely be lower if we went abroad," says F. F. Behm, Royal's facilities planning manager, "but it would take us five years to pay off the initial investment." Labor is also getting scarce in Europe—which could mean higher wages are on the way. That's one reason Royal decided to stay home.

- **Modernization Road**—Instead, Royal, which has a new plant for portables that's one of the most modern in the industry, decided to embark on a \$1-million modernization program at its main plant. This was to be its way out of the squeeze. All the Big Four manufacturers are taking the same general route.

The methods they're using are many. Over the years departments have sprung up helter-skelter, so that workers in closely related jobs found themselves at different ends of a plant. And there was just no flow to production. Now the manufacturers are relocating departments, consolidating equipment and personnel. Last year Smith-Corona consolidated four plants into three, ending up with 40% more capacity by unplugging production channels and using conveyors. Royal this year picked up 50,000 sq. ft. of space in its 575,000-sq.-ft. Hartford plant by consolidating.

- **Conveyor Controversy**—Not all of the Big Four agree, however, on all details of modernization. Remington and Royal are firmly set against using conveyors on assembly lines; Remington tried them



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"Diamond Arrow" two-level-ball-
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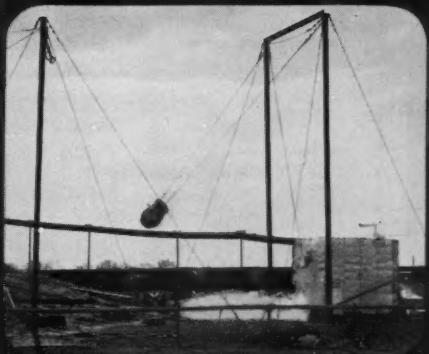
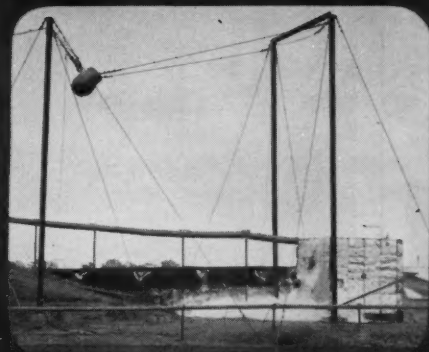
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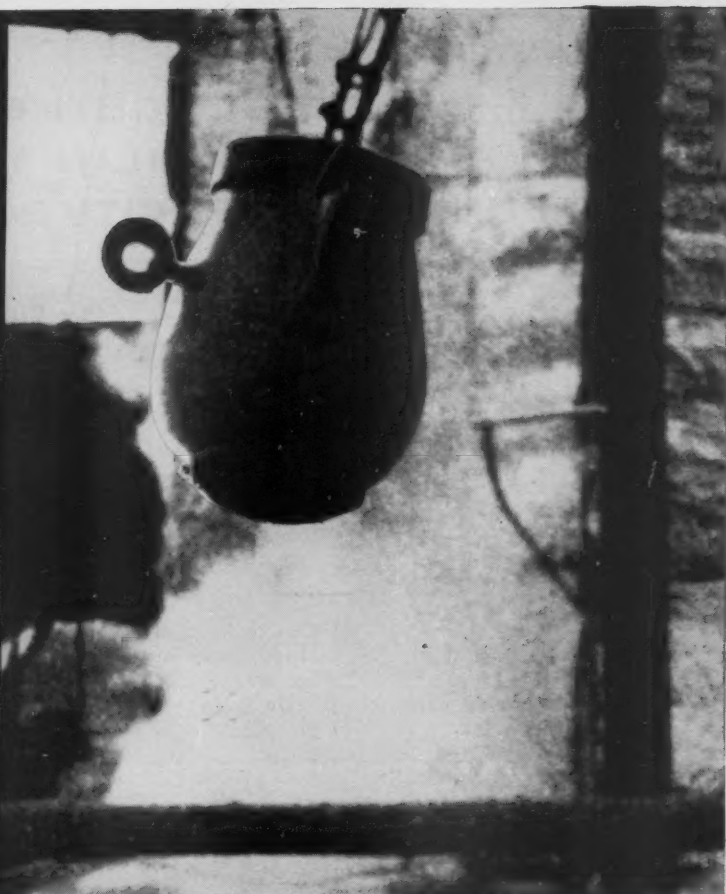


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Two-ton wrecking ball released from height of 19 feet slams down against 9% nickel steel vessel refrigerated to -320°F . Vessel withstood blows without post-fabrication thermal treatment.



IMPACT in "Operation Cryogenics"! At U.S. Steel's Fairless Works, over 82,000 ft-lb blow puts 9% nickel steel vessel to test far more severe than service conditions. "Operation Cryogenics" is a cooperative program of U.S. Steel Corp., Chicago Bridge & Iron Co., and Inco.

9% Nickel steel wins giant hammer test at -320°F

"Operation Cryogenics" proves 9% Nickel steel vessels need no thermal treatment after welding

Imagine the tremendous impact when this two-ton wrecking ball swings down through a long arc and smashes against the steel tank!

Certainly brutal punishment at ordinary temperatures...

But in this test the tank was filled with liquid nitrogen and held at 320 degrees below zero Fahrenheit.

At this ultra-cold temperature, many materials become brittle and shatter under impact. But steel containing 9%

nickel remains tough and ductile. In fact, the yield and tensile strengths of 9% nickel steel actually *increase substantially* as temperature is lowered.

In test after test, the pressure vessels—not thermally treated after welding—withstood massive impacts as high as 82,000 ft-lb.

These tests prove that 9% nickel steel, without thermal treatment after fabrication, provides the high strength and toughness for safe, economical pressure

vessels to contain and transport low-temperature liquids.

When you order, design, or build equipment for production, storage, or transport of liquefied gases at temperatures down to -320°F , specify 9% nickel steel for safety and economy. And for engineering data on 9% nickel steel, and other steels for low-temperature service, write to Inco.

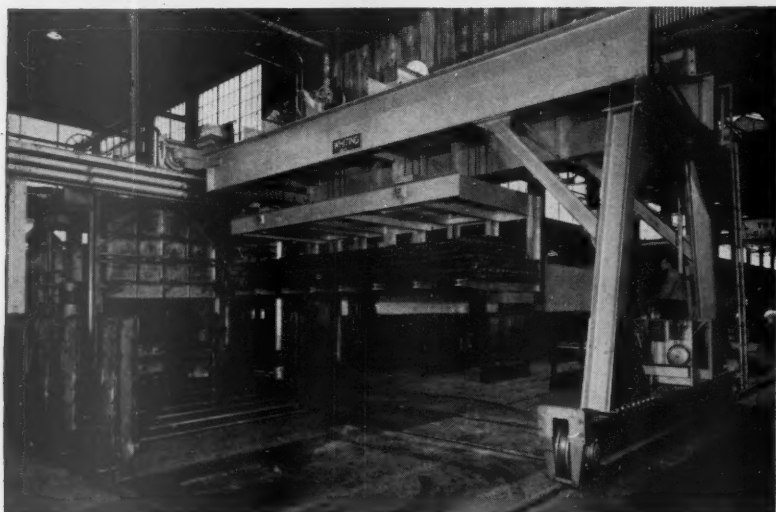
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A simple solution? Yes. But B.&L. engineers had been nettled for years by the heat treating log jam. They considered many possibilities including lift trucks.

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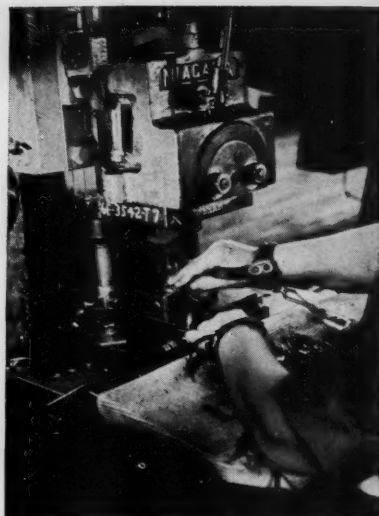
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PUNCH PRESS is used to make a small part for typewriter's tabular key assembly.

and threw them out. But Smith-Corona has been putting in more conveyors than ever; its Vice-Pres. Edwin J. Graf says, "When we first installed conveyors, we cut our work-in-progress inventory from 25,000 to 5,000 machines."

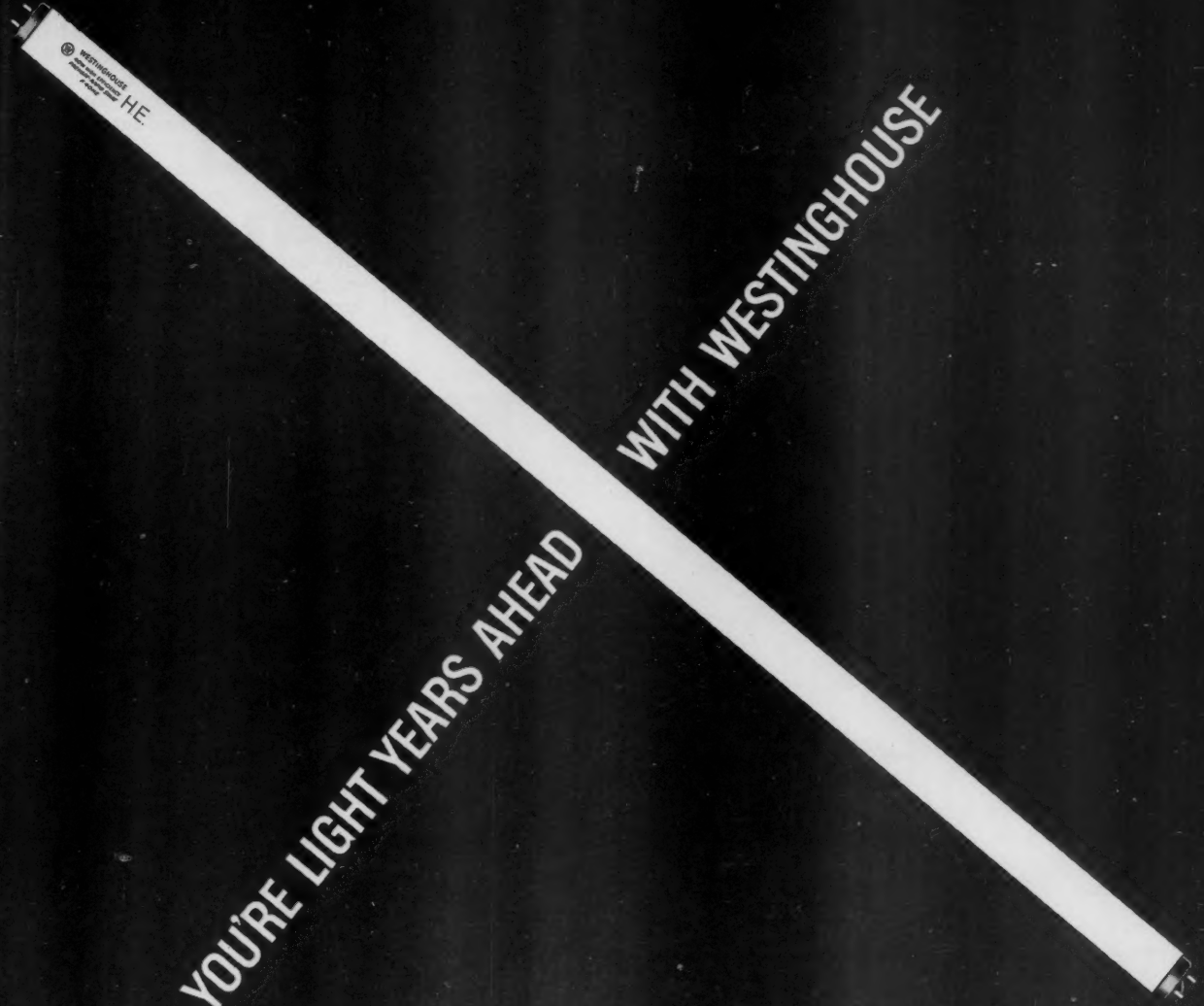
Underwood, following the Olivetti pattern in Italy, recently added conveyors to a second assembly line and doubled its output.

For scrap cleanup, Smith-Corona plans a conveyor to carry scrap from its machine tools to outside disposal containers. Here, Royal has bigger ideas—a conveyORIZED oil reclamation unit for chips from its screw machines. But Marvin Eisenberg, assistant general manager of Remington's plant, warns: "You can go too far with something like this. Why not just a workman with a wheelbarrow?"

• **Larger Presses**—Heftier presses are coming in, too. Royal is putting in its biggest yet—a 150-ton affair, 50 tons bigger than its next in size. A conveyor under it will carry punched parts to their destination. Underwood and Smith-Corona both have 250-ton presses. IBM, at its Lexington plant, has the Paul Bunyan of the industry—600 tons.

The big presses often eliminate secondary press operations and a lot of materials handling. In progressive dies, steel can be blanked, punched, and pierced in almost one operation. Yet even Underwood, which is heavy on big-tonnage presses, isn't convinced they're the last word. "You lose a lot of flexibility that you have with small presses," says Vice-Pres. L. C. Bohen.

• **Type-Maker**—Within the last year, both Remington and Royal have gone over to automatic type-rolling—one of the latest automatic systems in typewriter plants. IBM, Smith-Corona, and Underwood took this step several years



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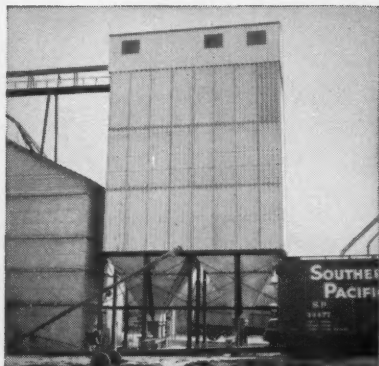
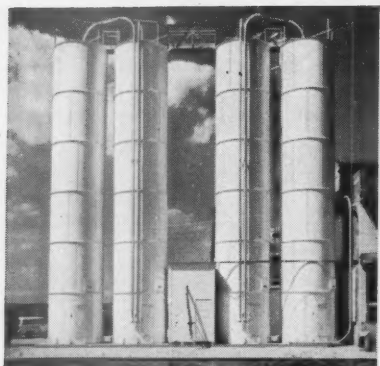
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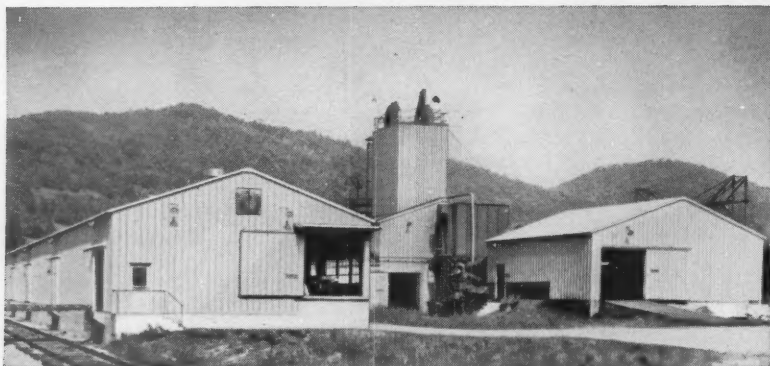
Westinghouse



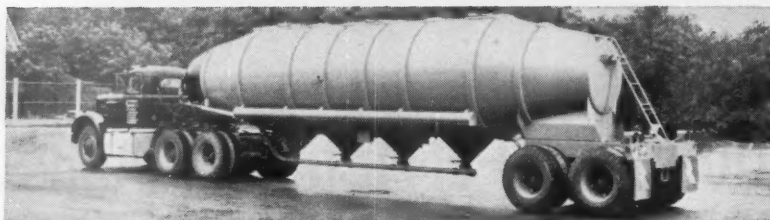
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ago. Basically, it's a roll-forming process. A hopper on top of the machine is loaded with blanks—soft, steel slugs to be squeezed into a letter or numeral. These feed automatically to a roller two at a time, the roller revolves, a die closes on the slug, and the letter is produced by a kneading or knuckling action of the roller.

It used to require a worker to feed each machine. Now one worker can watch several machines. Remington hopes to save \$50,000 to \$60,000 a year.

• **Production Brains**—In their modernizing, typewriter makers are even turning to computer brains. IBM has one of its 650s keeping track of production in Lexington. Royal has ordered one of its RPC 9000s to do this job in Hartford.

Royal's Bernard Rothschild, a methods engineer, envisions a day of computer use for inventory control. A box of parts would move from the machine shop by conveyor to a scale, which would automatically weigh the box, then flip out a punched card for computer input, carrying the number of parts and inventory number.

• **Toward Automatic Assembly**—Along typewriter assembly lines today, you find almost no machines. The closest thing to automatic assembly is automatic copper brazing of parts and automatic screw assembly. IBM, however, does have a near-automatic system for putting together six different models of cam assemblies—the tiny units that make the typebars flip up against the carriage when a key is pushed down. Three workers are spotted along the line to put pieces in place. The system rivets two studs, welds frame members at two points, makes a hole in the welded assembly, heat-hardens the welded end.

Even if truly automatic assembly systems were available, typewriter production men think the cost would be hard to justify. One way of streamlining assembly without buying costly equipment is to localize more subassembly jobs. Underwood, for example, has two new subassembly lines going in. At one, six girls at a circular conveyor will put together tabular key units at the rate of about 300 every eight hours—30% to 40% better than the old system.

The other will be for the carriage assembly itself, with six workers at a long table working on the carriage as it moves along, suspended on a rail or track. Underwood expects this to save about \$35,000 a year.

• **No Sure Answer**—Even with all these improvements, the Big Four won't be definitely out of the woods. "We can't really be sure all this will be the answer," says one veteran executive. "It's one of those things where you wait a year or so and see." **END**

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Maher Resumes Reed Roller Bit Post; Hope Dons Three Hats at Perfect Photo

Turnabouts in the top management of two companies took place last week when John F. Maher returned as president of Reed Roller Bit Co. and Chmn. Karl Hope of Perfect Photo, Inc., resumed the additional jobs of president and treasurer. Both Maher and Hope had left these jobs within the last year.

Maher's ouster and reinstatement primarily involved an argument over Reed Roller Bit's proposed merger with Dresser Industries, Inc. Last November, after Maher left and Chmn. Ray O. Shaffer took over as president and chief executive officer, negotiations went ahead rapidly and a tentative agreement was reached that provided for a swap of seven Dresser shares for each 10 Reed shares outstanding.

Meanwhile, Maher was collecting the support of other stockholders who opposed the merger. A few weeks ago Shaffer changed his mind about the stock swap and the deal fell through. Maher, back in control, says he has no intention of resuming negotiations with Dresser and expects a shakeup in the board that will eliminate directors who spearheaded his ouster last fall.

Karl Hope's return to the presidency at Perfect Photo is probably the first step in a settlement of his \$4-million suit against several investment banking concerns and Wesleyan University. He claims that Warren G. Grabb and Harry J. Sentiff—they resigned last week as president and vice-president respectively—defrauded him of \$4-million when they persuaded him to sell 205,400 shares of Perfect Photo stock last July (BW-Dec.31'61, p43). After selling his stock, about 52% of the outstanding shares, he had resigned as president but retained the chairmanship.

• • •

Discrimination Against Women Workers Is Waning, Office Survey Shows

Although women are still the office underdogs when it comes to getting a promotion, discrimination against them is on the wane. That's the finding of a National Office Management Assn. survey of employment practices in more than 1,900 industrial and service organizations throughout the country.

Nearly half the employers surveyed denied that they would give preference in promotion to a male office worker over a female one when both were equally qualified. And only a third admitted having a double standard pay scale for men and women.

According to NOMA Executive Director W. T. Cavanaugh, that represents "a tremendous advance over what the situation was only 15 years ago." Since the demand for experienced clerical and supervisory personnel has been growing and women make up a growing

MORE NEWS ABOUT MANAGEMENT ON:

- P. 138—A small, privately held company finds an outside board can be useful.

portion of the available labor force, he thinks this change is all to the good.

Plenty of the old attitudes linger, however. Most of the companies think there are more problem workers (prima donnas, gossips, and the like) among women than men, and a majority think that female employees tend to be neurotic. Shifting to an objection that's somewhat easier to prove, 80% report that women have a higher absenteeism rate.

• • •

Management Briefs

A. J. Porta resigned as executive vice-president of Studebaker-Packard Corp. last week after 35 years with the company. The move came just two months after the surprise selection of Sherwood H. Egbert as S-P president (BW-Jan.7'61,p68). Egbert, who had no auto experience, insisted that he would have to learn the business from Porta and other long-time S-P executives even though they had opposed his election as president, but auto industry observers have been expecting a shakeup. Porta, 57, will become vice-president for financial affairs of the Associates Investment Co., of South Bend, on Apr. 1.

Older workers who have trouble finding jobs often put part of the blame on the widespread prevalence of pension plans. A survey of 116 personnel executives by the Bureau of National Affairs suggests there is some truth in the charge. About one-sixth of the companies surveyed have a cut-off age in hiring, and most of them said it was because of the pension plan. Some of those without formal cut-off ages conceded the pension plan had made them "more aware" of the age factor.

Confirmation that the controller's job is growing in stature (BW-Nov.12'60,p178) comes from an American Management Assn. study of the financial organization of 278 national corporations. The treasurer had lost some of his responsibilities to the controller in more than one-fifth of the companies surveyed; responsibility had moved the other way in only 6%. However, the treasurer was still more than three times as likely as the controller to be the chief financial officer.

Job enlargement—letting the individual worker do a bigger piece of the total job—has been endorsed as a way to make employees happier by a number of personnel executives. However, it can also be more efficient than job specialization, according to an article by University of Chicago Prof. Maurice D. Kilbridge in the *Journal of Business*. Kilbridge cites the case of a Midwestern washing machine manufacturer that switched the production of a pump from an assembly-line operation to a one-man job. The work formerly done by six men on a conveyor line is now done at four one-man work stations. Space and equipment and direct labor cost were cut for a total annual saving of about 10%.

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BOARD and top management of family-owned Williamson Adhesives discuss sales outlook. Clockwise left foreground to right: J. C. Menk; W. O. Kurtz, Jr.; Mrs. J. A. Russell, vice-president and treasurer; her son Donald G. Williamson, president; G. Walter Ostrand; F. W. Galaty; Melville Ross, Jr., plant manager; Henry E. Norton, sales manager. One of the outside directors, John A. Ebeling, was not present at this board meeting.

Outside Board Helps Steer Small Company

In the past few years, more and more big-company managements have yielded the majority position on their boards of directors to outsiders. Although that's been the trend in smaller companies, too, plenty of heads of little family enterprises have bucked it—sometimes just because they don't want other people snooping around.

After 10 years' experience with an outside board, however, Donald G. Williamson, president of Williamson Adhesives, Inc., would recommend it to any small, privately held company. His board, he claims, provides "a rudder on our ship that many small businesses don't have."

• **Small Ship**—There's no doubt that Williamson Adhesives is a small business. It turns out specialty epoxy-resin-based adhesives for industrial customers in a single 12,000-sq.-ft. plant in Skokie, Ill. Its assets are only about \$300,000; sales last year totaled just under \$1-million.

The seven factory workers have only one foreman, the plant manager (who also doubles as office manager). He, Williamson, and the sales manager (who is also the whole sales staff) are the only real executives. Even if you count Williamson's wife and his mother, company officers who have no office space, there are only 17 employees.

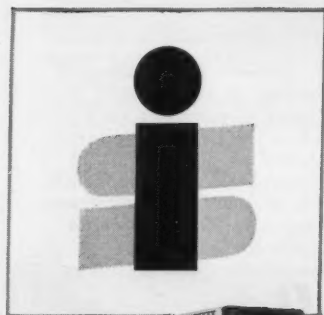
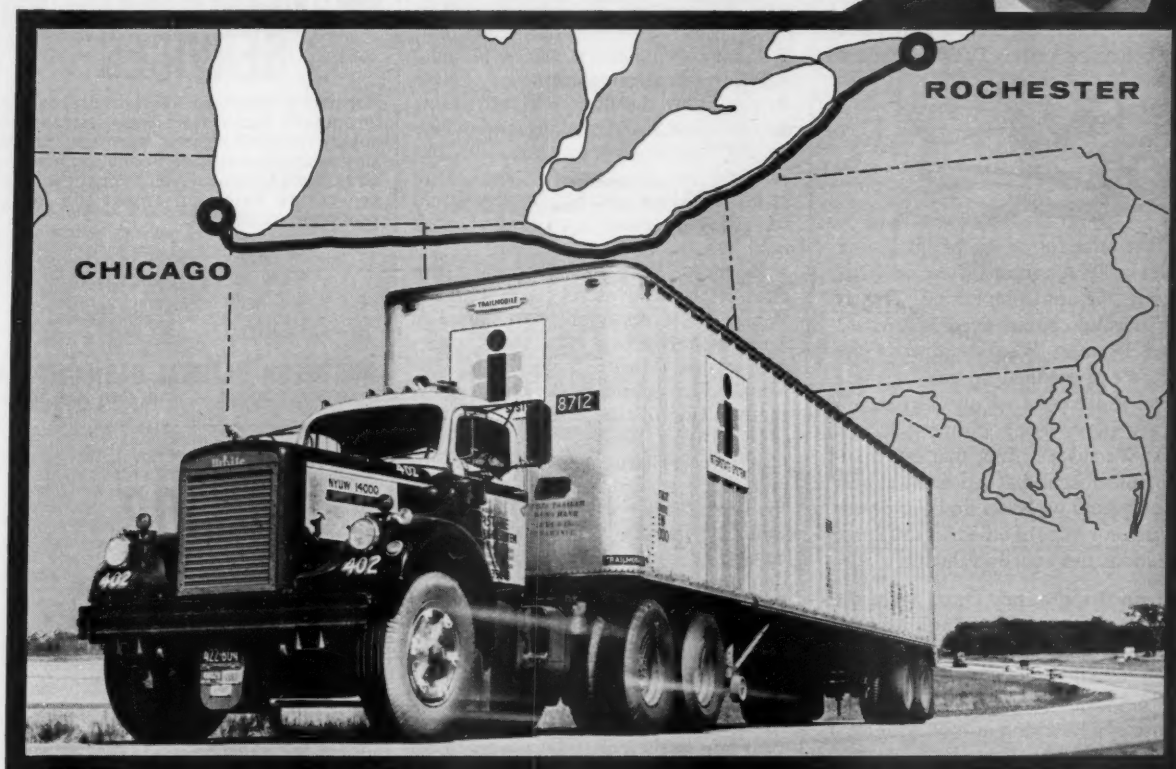
Even so, on the board with Williamson, his mother, and the plant manager are four past and present executives of much larger companies and a Chicago attorney. Officially, the outsiders control the board. "They could fire me," says Williamson. But the stockholders who elect them are all members of the family.

Originally, Williamson decided on an outside board chiefly because he felt his mother, the majority stockholder, was entitled to some non-family protection. Now he is convinced that the venture has paid off in other ways for the company.

From Williamson, the directors get \$10 apiece, cocktails, and dinner at each quarterly board meeting, plus what he calls "a chance to see all the problems of business in a little capsule." From them, he gets a lot of mileage.

• **Access to Experience**—He calls on them freely—at board meetings, over lunch, or by telephone—for information and advice in their own specialized areas. The financial man is W. O. Kurtz, Jr., vice-president, American National Bank & Trust Co. of Chicago; Fillmore W. Galaty, assistant vice-president, Chicago Title & Trust Co., and John C. Menk are lawyers; G. Walter Ostrand, retired plant manager for

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BACKSTAGE AT BUSINESS WEEK

Head in the clouds. Our aviation writer, Christopher Elias, is having trouble these days finding time to cover his reporting assignments. Ever since we ran his big story on airline financing last year, airline executives keep phoning him for information (a switch we find most engaging). He's also been busy collecting prizes. The most recent



—a first prize for seven of his airline stories in TWA's annual Aviation Writing and Picture Competition. This is Elias' second consecutive TWA award—and Business Week's fourth in five years. We're gratified no end by these several indications of our magazine's success in covering airline business news. We suspect, too, that our management subscribers (and that's almost the only kind we have) find our down-to-earth coverage of other Air and Space Age industries equally valuable.

Feet on the ground. Once again the results are posted. The Publishers Information Bureau reveals that Business Week led all general, general-business and news magazines in business and industrial advertising in 1960. Our closest competitor, in fact, was over 2,500 pages behind. This is the 23rd consecutive year we've finished far out in front.



(A literary friend informs us there's a new book called "The Loneliness of the Long-distance Runner." Wonder if it's about Business Week.)

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Link-Belt Co., has both production and sales experience. Miscellaneous problems go to John A. Ebeling, vice-president, Olson Transportation Co., who comes closest to being the general manager of a business (he runs Olson's Chicago operation).

When broader questions come up, they all pitch in. A profit-sharing retirement plan that Williamson Adhesives put through last year took a year to work out and three board meetings to win final approval. The directors, Williamson says, "proceeded much more carefully than I would have done in designing the plan."

Having an outside board, he reports, makes him "run a tighter ship" in other ways. For example, the directors pushed for a better cost accounting system. Williamson thought it wasn't feasible. But Kurtz kept pounding away: "How do you know the price is right? How do you know you're making any money on it?" The system, now in, has "worked out beautifully." Says Williamson: "Many small businesses would say it's too complicated, but I wish we'd had it 10 years ago."

• **Balance Wheel**—Williamson also finds his board a useful balance wheel. While employees might be inclined to agree with the boss, the board argues every move. Mostly, according to Williamson, its action is "a brake rather than cutting off the motor."

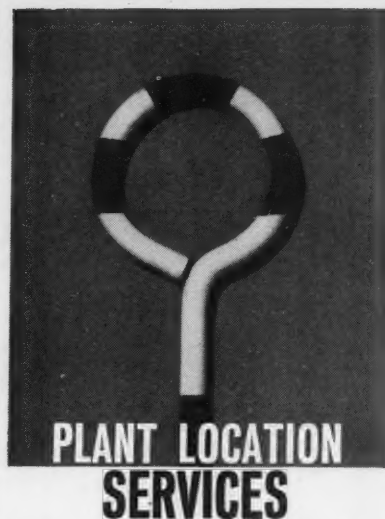
In 10 years, he says, there have been only three or four major disagreements and only one real instance of veto by the board. That was when Williamson wanted to build a new plant. After two vetoes, he got his way. Then fire suddenly gutted the old Chicago factory. Because the framework was already up in Skokie, the company was doing business in the new plant five days (including a weekend) later.

Williamson had no chance to say, "I told you so." One board member beat him to the punch by asking, "Don, aren't you glad we forced you to build a new building?" Williamson was "stunned," he says, "but it broke the ice."

More often, though, the board's opinion carries in the end. As one director explains, "Any venture of this nature depends on the owner's interest in having it work. He wants our advice and in every instance follows it."

Williamson himself is enthusiastic both about the quality of the advice he gets from the directors and about their pressure for excellence. "They won't let me relax," he says. "It keeps you awake."

And his mother, he reports, is also "delighted" with the board. It takes worry off her mind about the company. "She can just worry about me as a son," he points out. **END**



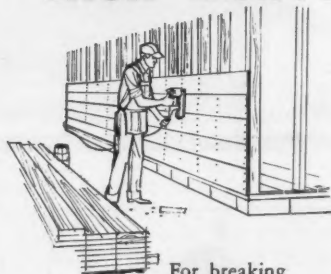
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First Step Toward Arms Control

Negotiations for a ban on atomic tests resume next week in Geneva. Far more is at stake than the proposed treaty formalizing, under appropriate inspection, the U.S.-British-Soviet moratorium on military nuclear testing. These negotiations will give the Kennedy Administration its first opportunity to find out whether Moscow is ready, as the U.S. is, to make the test ban a first step on the road to more direct and meaningful forms of arms control (page 54).

The Administration is putting a high priority on its efforts to find some way to reach agreement with the Soviet Union on a mutually acceptable arms control system—one that would enhance our national security by making mutual deterrence more reliable and stable. Heading this effort in Washington is John J. McCloy, whose long and varied public service eminently qualifies him for this task. The same can be said of Arthur H. Dean, who will lead the negotiating team that the U.S. is sending to Geneva.

Neither Pres. Kennedy nor McCloy has any illusions about the chances of achieving their goals. They realize that, at best, it will be a long and arduous job to come to terms with Moscow on arms control. McCloy himself is struck with the difficulties of getting agreement on this issue while Moscow still is dedicated to the overthrow of democracy throughout the world. But he believes there is a reasonable chance that sooner or later Moscow will realize that it has a common interest with the U.S. in slowing down the arms race and establishing an effective system of control. Along with Kennedy's other disarmament advisers, McCloy is convinced that the U.S. must leave no stone unturned in pushing its case with the Soviet Union.

Even if the Administration saw less hope of ultimate agreement than it does, there would be good political reasons for Washington to push ahead toward its goals. As leader of the free world, the U.S. cannot afford to ignore the growing sentiment in the world for some control over existing nuclear weapons and some limitations to the spread of nuclear technology. Any constructive approach we take to arms control will have the backing of virtually all our allies and will greatly enhance our standing with the new neutralist nations of the world.

The Soviet Union, of course, is under somewhat the same pressure from world opinion. It can only be hoped that Moscow will respond to these pressures, and to the requirements of its own national security, by agreeing to a test ban treaty and to subsequent negotiations on arms control.

This may be a forlorn hope, but we are confident that the Administration is aware of all the difficulties. No matter how small the glimmer of hope, the stakes are so great that no possibility can be neglected.

The Bull Market

A visitor from Mars would be puzzled by the contrast in atmosphere between Wall Street and the rest of the country. For Wall Street is brimming over with cheer and prosperity. The heavy volume of trading means handsome earnings for brokers. And the sharp rise in stock prices spells profits, on paper at least, for investors.

It would not be surprising if the Martian felt that Wall Street was out of step with events. Many Americans feel the same way. Yet Wall Street has a good record for anticipating the course of business, so that instead of being out of step it may actually be one or two steps ahead of the over-all economy.

The fact is that Wall Street does not exist in a vacuum. Whatever the man from Mars may think, the course of stock prices has a relationship to the course of the economy. And both the Martian and officials in Washington should be taking heed of what Wall Street is saying.

It is clear that investors are betting on an upturn. Indeed, the rapid rise of stock prices at a time when the economy is soft and corporate earnings are falling indicates that Wall Street is hoping for a prompt and vigorous recovery. It is shrugging off the spate of discouraging statistics as if convinced that the bigger the drop in the economy the more the new Administration will do to spur business.

This confidence in the new Administration should be heartening to Washington. But it also carries some sobering implications.

On one hand, the market has reached a level that makes it extremely vulnerable in the event that the expected and hoped-for recovery does not take place. And if investor sentiment, which is always mercurial, changes from optimism to despair, it could have its impact on the over-all economy.

On the other hand, investors seem to be betting that inflation will accompany recovery—and that common stocks, even at present prices, represent the only real hedge. This also presents a problem. If the Administration means to live up to its pledge to promote growth without inflation—as presumably it does—then it will have to be doubly careful not to say or do anything that would fan the hopes of the speculators.

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